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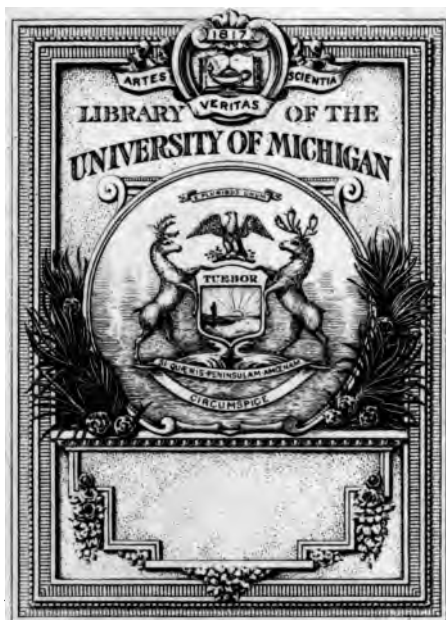
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74  
56  
N.  
68

CHECK LIST  
OF THE  
NOCTUIDAE  
OF  
America, North of Mexico,

BY  
*Agrotus*  
*delisse*  
A. R. GROTE, A. M.

I.  
Bombyciac and Noctuelitac (Nonfasciatae).

BUFFALO, N. Y.  
Reinecke & Zesch, Printers, 500 Main Street, near Mohawk.

1875.

# PREFACE.

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The present list includes a full synonymy of the species so far as known. No references are given and the plan of Dr. LeConte's Catalogue of the Coleoptera, and that of the List of North American Lepidoptera, has been followed; in addition the species are numbered for the convenience of students.

I take this opportunity to thank the different correspondents who have sent me material in this Family which I have made for many years the object of my special study.

Unidentified names are followed by a --.

Preoccupied names are marked with a ||.

Names cited in error are marked with a ‡.

*The Buffalo Society of Natural Sciences,*

**A. R. G.**

November 1st, 1875.

# CHECK LIST

— OF —

## North American Bombyciae and Noctuelitae (Nonfasciatae)

— BY —

AUG. R. GROTE, A. M.

### NOCTUAE.

#### Bombyciae Hubn. <sup>1</sup>

##### VERAE Grote.

##### LEPTINA Guen.

1. dormitans Guen.
2. latebricola Grote.  
(praec. var?)
3. ophthalmica Guen.
4. Doubledayi Guen.

##### FALSAE Grote.

##### PSEUDOTHYATIRA Grote.

- ♂ - 5. cymatophoroides Grote.  
    ♂ Thyatira cymat. Guen.
- ♂ - 6. expultrix Grote. ♂  
    ♂ Thyatira cymat. † Guen.

##### HABROSYNE Hubn.

- ♂ ♀ - 7. scripta Grote.  
    Thyatira scripta Gosse.  
    Thyatira abrasa Guen.

##### THYATIRA Ochs.

- 8 pudens Guen.

#### Noctuelitae Latr.

##### NONFASCIATAE Borkh.

##### EUTOLYPE Grote.

9. Rolandi Grote.  
    Copipanolis vernalis Morr.

##### DICOPIS Grote.

10. muralis Grote.
11. Thaxterianus Grote.
12. electilis Morr.—

##### RAPHIA Hubn.

- ♂ - 13. abrupta Grote.
14. frater Grote.  
    Saligena personata Walk.

##### CHARADRA Walk.

15. deridens G. & R.  
    Diptera der. Guen.  
    Acronycta circulifera Walk.  
    Char. contigua Walk.

<sup>1</sup> CYMATOPHORA CANIPLAGA Walk., and CYMATOPHORA IMPROVISA Hy. Edw., are unknown to me and perhaps do not belong to this group.



16. *dispulsa* Morr.  
 17. *propinquilinea* Grote.  
 HARRISIMEMNA Grote.  
 18. *sexguttata* Grote.  
*Notodonta serg.* Harris.  
*Grammophora tristigata* Walk.  
 FERALIA Grote.  
 19. *jocosa* Grote.  
*Diptera joc.* Guen.  
 MOMOPHANA Grote.  
 20. *Comstocki* Grote.  
 DIPHTHERA Hubn.<sup>2</sup>  
 21. *fallax* H.-S.  
 APATELA Hubn.  
 22. *grisea* Grote.  
*Noctua grisea* Barnston.  
*pudorata* Morr.  
 23. *tritona* Grote.  
*Triaena tritona* Hubn.  
 24. *dentata* Grote.  
 25. *occidentalis* Grote.  
*Acronycta occid.* G. & R.  
 ♂ ♀ - 26. *telum* (Guen.).—  
 ♀ - 27. *morula* Grote.  
*Acronycta mor.* G. & R.  
 ♂ - 28. *lobeliae* Grote.  
*Acronycta lob.* Guen.  
 ♂ - 29. *furcifera* (Grote).  
*Acronycta fure.* Guen.  
 30. *hasta* Grote.  
*Acronycta hasta* Guen.  
 31. *Radcliffei* Harvey.  
 32. *Harveyana* (Grote).  
 33. *quadrata* (Grote).  
 34. *interrupta* (Boisd.).—  
 35. *spinigera* (Grote).  
*Acronycta spin* Guen.  
 36. *funeralis* (Grote).  
*Acronycta fun.* G. & R.  
*Acr. americana* † Harr. (Ent.  
 Cor. larv.)  
 37. *innotata* Grote.  
*Acronycta inn.* Guen.  
*Diphthera Graefii* Grote.  
 38. *lupini* (Grote).  
*Acronycta lupini* Behr Ms.  
 39. *lepusculina* (Grote).  
*Acronycta lepusc.* Guen.  
*Acr. populi* Riley.  
 40. *insita* (Walk.).  
 (spec. distinct.?)  
 ♀ - 41. *americana* Harris.  
*Phalaena aceris* † Abb larva.  
*Acron hastulifera* † Guen.  
 ? *Phal. hastulifera* Abb. imago  
 42. *acericola* (Guen.).—  
*Phalaena aceris* † Abb. imago.  
*Phalaena hastulifera* Abb. larva  
 teste Guen.  
 ♂ ♀ - 43. *dactylina* Grote.  
 ♀ - 44. *rubricoma* (Grote).  
*Acronycta rubric.* Guen.  
 45. *luteicoma* Grote.  
*Acronycta luteic.* G. & R.  
 ♂ ♀ - 46. *brumosa* Grote.  
*Acronycta brum.* Guen.  
*Acron. Verrillii* G. & R.  
 47. *subochrea* Grote.  
 48. *aspera* (Morr.).—  
 ♂ ♀ - 49. *noctivaga* (Grote).  
 ♀ - 50. *superans* (Grote).  
*Acronycta super.* Guen.  
 51. *persuasa* Harvey  
 52. *afflicta* (Grote).  
 53. *longa* (Guen.).—  
 ♂ ♀ - 54. *clarescens* (Grote).  
*Acronycta clar.* Guen.  
 55. *ovata* Grote  
 ♀ - 56. *hamamelis* (Grote).  
*Acronycta ham.* Guen.  
 57. *increta* Grote.  
*Acronycta incr.* Morr.  
 ♀ - 58. *dissecta* (Grote).  
*Acronycta diss.* G. & R.  
 59. *albarufa* Grote.  
 ♂ - 60. *vinnula* (Grote).  
 61. *paupercula* (Grote).  
 62. *exilis* Grote.  
 ♂ ♀ - 63. *sperata* Grote.

<sup>2</sup> The type of this genus is the European ORION, a species determined by Hubner as the APTELYNA of Linne, which latter proves however, different. I have proposed to restrict MOMA to M. ASTUR (Gram.) and the name TRICHOSEA LUDIFICA for the DIPHTHERA LUDIFICA of Lederer.

64. lithospila Grote.  
 65. perditia Grote.  
 66. xyliniformis Grote.<sup>3</sup>  
*Acronycta xylinif.* Guen.  
*Acron. xylinoides* Guen.
- § *Eulonche* Grote.  
 67. obliterata Grote. ♀  
*Phalaena obliterata* Abb. & Sm. ♂  
 68. lanceolaria Grote.  
 69. insolita Grote.
- JASPIDEA Hubn.  
 70. lepidula Grote. ♂  
 71. palliatricula Grote. ♂  
*Bryophila pall.* Guen.  
 72. corticosa (Guen.).—  
 73. pericara (Morr.).—  
 74. discincta (Walk.).—  
 75. discivaria (Walk.).—  
 76. discinigra (Walk.).—  
 77. nana (Hubn.).—  
 78. teratophora (H.-S.).  
*Erastria inscripta* Walk.
- CERMA Hubn.  
 79. Cora Hubn.  
*?Chariptera festa* Guen.
- POLYGRAMMATE Hubn.  
 ~ 80. hebraicum Hubn.
- MICROCOELIA Guen.  
 81. fragilis Guen.  
 82. diphteroides Guen.  
 82a. oblitterata Grote. ♂  
 AGROTIS Hubn.  
 83. Chardinyi (Loisd.).  
*Agr. gilvipennis* Grote.
84. sigmoides Grote.  
*Noctua sigm.* Guen.  
 85. elimata (Guen.).—  
 86. dilucida Morr.—  
 87. badicollis Morr.  
*Ammoconia badic.* Grote.  
 88. attenta Grote.  
 89. perattenta Grote.  
 90. phyllophora Grote.  
 91. rubifera Grote.  
*rubi* † Grote.  
 92. conflua Tr.  
 93. baja (S. V.).  
 94. Normaniana Grote.  
*Agr. obtusa* Speyer.  
 95. rufipectus Morr.  
 96. haruspica Grote.  
*Agr. unimacula* || Morr.<sup>4</sup>  
 97. innotabilis Grote.  
 98. c-nigrum (Linn.).  
 99. bicarnea Grote.  
*Noctua bic.* Guen.  
*Feltia ducens* Walk.
100. Treati Grote.  
 101. auxiliaris Grote.  
 102. introferens Grote.  
 103. perexcellens Grote.  
*Agr. excellens* || Grote.  
 104. cinereomacula Morr.  
 105. gularis Grote.  
 106. fennica (Tausch.).  
 107. subgothica (Haw.).  
*Agr. jaculifera* Guen.  
 108. tricola Lintn.  
 109. herilis Grote.

<sup>3</sup> The following names cannot be identified from published data concerning them: *Acronycta modica*, *impleta*, *contacta*, *allida*, *decolorata*, *impressa*, *fasciata*, *mixta*, *cristifera*, of Walker in the British Museum Lists; *ulmi*, *pruni*, *salicis*, of Harris in his Entomological Correspondence, edited by Mr. Scudder.

<sup>4</sup> Related to the European *angur*. Mr. Morrison is in error, both in supposing that his name could be used for this species after having been previously employed for another species or variety in the same genus, and in pronouncing *unimacula* Staud., a "simple variety" of *plecta*. Dr. Staudinger, who ought to know his own species, is doubtful that it is a variety, while Lederer, who has been considered good authority, thought it a variety of *leucogaster*.

110. *exsertistigma* Morr.  
 111. *Wockei* Moeschl.  
 112. *vittifrons* Grote.  
 113. *ochrogaster* Guen.) —  
 ♀ — 114. *plecta* Linn. N  
 115. *obeliscoides* Guen.) —  
 116. *sexatilis* Grote.  
 117. *Lewisii* Grote.  
 118. *silens* Grote.  
 119. *lagna* Grote.  
 120. *Hollemani* Grote.  
 121. *acclivis* Morr.  
 ♂ ♀ — 122. *badinodis* Grote.  
 ♀ — 123. *collaris* G. & R.  
 124. *carissima* Harvey.  
 125. *formalis* Grote.  
 126. *geniculata* G. & R.  
 127. *tessellata* Harr.  
 ♂ — 128. *decolor* Morr. *maizi* Fitch.  
*Agr. campestris* Grote.  
 129. *versipellis* Grote.  
 130. *redimicula* Morr.  
 131. *Ridingsiana* Grote.  
 132. *4-dentata* G. & R.  
 133. *plagigera* Morr.  
 134. *cicatricosa* G. & R.  
 135. *pitychrous* Grote.  
 136. *Wilsoni* Grote.  
 137. *specialis* Grote.  
 138. *mimallonis* Grote.  
 139. *rufipennis* Grote.  
 140. *manifesta* Morr.  
 141. *manifestolabes* Morr.  
 142. *monochromatea* Morr.  
 143. *muraenula* G. & R.  
 144. *scandens* Riley.  
 145. *friabilis* Grote.  
 146. *Bostoniensis* Grote.  
 147. *violaris* G. & R.  
 148. *sculptilis* Harvey.  
 149. *chortalis* Harvey.  
 150. *balanitis* Grote.  
 151. *fumalis* Grote.  
*Agr. permunda* Morr.  
 152. *fuscigera* Grote.  
 153. *feniseca* Harvey.  
 154. *messoria* Harr.  
*Agr. repentis* G. & R.  
*Agr. Cochranii* Riley.  
*Agr. lycarum* † Grote (Cal.).  
 155. *infracta* Morr. —  
 156. *Rileyana* Morr.  
 157. *velleripennis* Grote.  
 158. *pastoralis* Grote.  
 159. *gagates* Grote.  
 160. *intrita* Morr.  
 161. *euroides* Grote.  
*Agr. perperura* Morr.  
 162. *imperita* (Hubn.).  
*Agr. comparata* Moeschl.  
 163. *saxigena* Morr.  
 164. *dissona* Moeschl.  
 165. *rava* H. — S.  
 166. *fusca* Boisd.  
*Agr. septentrionalis* Moeschl.  
 167. *islandica* Staud.  
*Agr. opipara* Morr.  
 168. *umbrata* Pack. —  
 169. *littoralis* Pack.  
 170. *speciosa* (Hubn.). —  
 171. *Staudingeri* Moeschl. —  
 172. *Drewezeni* Staud. —  
 173. *oblata* Morr.  
 174. *Westermanni* (Staud). —  
 175. *Morrisoniana* Riley.  
 176. *gladiaria* Morr.  
 177. *venerabilis* Walk.  
*♀ incallida* Walk.  
 178. *volubilis* Harvey.  
 179. *stigmosa* Morr.  
 180. *gravis* Grote.  
 181. *Vancouverensis* Grote.  
 182. *segetum* (S V). —  
*Agr. texana* Grote.  
 183. *rudens* Harvey.  
 ♂ ♀ — 184. *annexa* Tr.  
 185. *malefida* Guen.  
 186. *spissa* Guen. —

- ♂ — 187. *ypsilon* (Rott.). ♀  
*Noct. suffusa* S. V.  
*Agr. telifera* Harr.
- ♀ — 188. *saucia* (Hubn.). ♂  
*Agr. inermis* Harr.  
*Agr. Ortoni* Pack.
189. *inconcinna* Harvey.  
 — 190. *clandestina* Horr. ♂  
 — 191. *brunneicollis* Grote.  
 — 192. *alternata* Grote. ♂  
 — 193. *cupida* Grote.  
 194. *brunneipennis* Grote.  
 195. *cupidissima* Grote.  
 196. *observabilis* Grote.
- § *Pachnobia* Guen.  
 197. *carnea* Guen.  
*Agr. okakensis* Pack.  
 197a. *scropulana* Morr.  
 198. *claviformis* Morr.  
*Pachn. orilliana* Grote.
- § *Matuta* Grote.  
 199. *Catherina* Grote.
- § *Anicla* Grote.  
 ♂ — 200. *lubricans* Grote.  
*Noctua lubric.* Guen.
- ♀ — 201. *incivis* Guen.  
*Anicla Alabamæ* Grote.
202. *simplaria* Morr.  
*Agr. simplicius* † Morr.
203. *brocha* Morr.
- § *Eurois* Hubn.  
 204. *digna* Morr.—  
 205. *pressa* Grote.
- ♂ — 206. *prasina* (S. V.).  
*Aplecta herbida* Guen.
- ♂♀ — 207. *occulta* (Hubn.).  
*Hadena implicata* Lef.
208. *astrecta* (Morr.).  
 209. *præfixa* Morr.—<sup>5</sup>
- POLYPHAENIS Boisid.  
 210. *herbacea* Guen.—  
 ADITA Grote.  
 211. *chionanthi* Grote.  
*Phalaena chion.* Abb. & Sm.
- MAMESTRA Ochs.  
 ♂♀ — 212. *purpurissata* Grote.  
 213. *nimbosa* Grote.  
*Aplecta nimb.* Guen.
- ♀ — 214. *imbrifera* Grote.  
*Aplecta imb.* Grote.
215. *latex* Grote.  
*Aplecta lat.* Guen.  
*Apamea demissa* Walk.
216. *condita* (Guen.).—  
 217. *adjuncta* Guen.  
 218. *lubens* Grote.  
*Mam. rufula* Morr.
219. *Farnhami* Grote.  
 220. *grandis* Led.  
*Hadena grandis* Boisid.
- ♂♀ — 221. *subjuncta* Grote.  
*Hadena subg.* G. & R.
222. *atlantica* Grote. <sup>6</sup>  
 223. *vicina* Grote.  
*?M. teligera* Morr.
224. *distincta* Grote.  
*Astrapelis dist.* Hubn.
- ♂♀ — 225. *legitima* Grote.  
 226. *lilacina* Harvey.  
*Mam. illabefacta* Morr.

<sup>5</sup> The following names cannot be identified from published data concerning them: *Agrotis divergens*, *hesitans*, *insignata*, *mollis*, *perlentans*, *radix*, *Graphiphora jucunda*, *expansa*, *ilapsa*, of the British Museum Lists. Information has been afforded me as to the species described scantily, and in some cases inaccurately, by Mr. Morrison Bost. Soc. N. History, 1874, pp. 162 et seq.

<sup>6</sup> This is a smaller species than *subjuncta*, and differs by the larger claviform and the absence of the black dash across the median space beyond this spot. The orbicular is more oblique, the reniform smaller than in *subjuncta*. The fore wings are more reddish and the hind wings darker than its ally. *Expanse* 30 mm.; May.

227. *assimilis* Morr.  
 228. (?) *curta* Morr.—  
 229. *Dimmocki* Grote.  
 230. *Rogenhoferi* Moeschl.—  
 231. *incincta* Morr.—  
 232. *thecata* Morr.—  
 233. *chartaria* Grote.  
 234. *albifusa* Grote. ?  
     *Hadena albif.* Walk.  
     *Mam. trifolii* † Speyer.
- ♂ ♀ — 235. *trifolii* (Esp.). ♀  
     *Noctua chenopodii* S. V.  
 236. *rugosa* Morr.—  
 237. *impolita* Morr.—  
 ♀ — 238. *detracta*.  
     *Hadena detr.* Walk.  
     *Mam. claviplena* Grote.
- ♂ — 239. *cuneata* Grote.  
 240. *puerilis* Grote.  
 ♂ — 241. *lorea* H.-S.  
     *Hydroecia lor.* Guen.
- ? — 242. *rosea* Harvey.  
 ? 243. *vindemialis* Grote.  
     ? *Ceramica vind.* Guen.  
     ? *Ceramica rubefacta* Morr.
244. *w-album* (Guen.).—  
 245. *ectypa* Morr.—  
 246. *repentina* Morr.—  
 247. *cinnabarina* Grote.  
 ♂ ♀ — 248. *renigera* Grote. Δ  
     *Celaena ren.* Steph.  
     *Oel. herbimacula* Guen.
249. *Goodelli* Grote.  
 250. *innexa* Morr.  
     *Perigrapha inn.* Grote.
- ♂ ♀ — 251. *marinitincta* Harvey.  
 ♂ ♀ — 252. *laudabilis* Grote.  
     *Hecatera laud.* Guen.
253. *illaudabilis* Grote.  
 ♂ ♀ — 254. *olivacea* Morr.  
 255. *4-lineata* Grote.
- DIANTHOECIA Bois.  
 ♂ — 256. *meditata* Grote.  
 257. *modesta* Morr.—  
 258. *rufula* Grote.  
 259. *subdita* Moeschl.—  
 260. *phoca* Moeschl.—  
 261. *capsularis* Guen.  
     *Raphia propulsa* Walk.
262. *leucogramma* Grote.  
 263. *niveiguttata* Grote.  
 264. *lustralis* Grote.  
 265. *pensilis* Grote.  
     ? *Mam. passa* Morr.
266. *palilis* Harvey.  
 267. *insolens* Grote.
- HADENA Schrank.  
 268. *Burgessi*.  
     *Luceria Burg.* Morr.
269. *delicata* Grote.  
 270. *loculata*.  
     *Luceria loc.* Morr.
271. *Sommeri* Lef.—  
 272. *exulis* Lef.  
     *Had. marmorata* Zett.  
     *Had. groenlandica* Lef.  
     *Had. gelata* Lef.  
     *Neuria cervina* H. — S.  
     *Crymodes poli* Guen.  
     *Crym. gelida* Guen.  
     *Crym. borea* Guen.
- ♂ ♀ — 273. *devastatrix* Grote.  
     *Phalaena devastator* Brace.  
     *Agrotis devast.* Auct.  
     *Manestra ordinaria* Walk.  
     ? *Mam. unicolor* Walk.  
     ? *Mam. contenta* Walk.

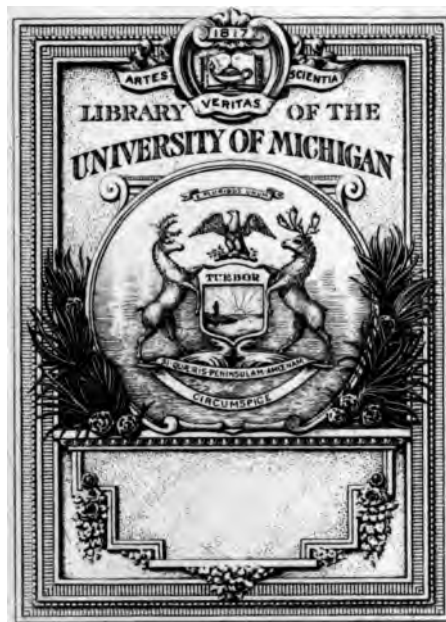
7 This form differs from *trifolii* as described by Speyer Stett. Ent. Zeit., 1875, 137, in the size and shape of the orbicular and tone of the primaries. But I have a N.Y. specimen which is different in these respects and which I take to be the true *trifolii*; this latter is my *chenopodii* B. B. S. N. S., 1, 104. A Californian specimen seems to differ from either.

274. *interna Grote.*  
 275. *passer (Guen.).—*  
 276. *lateritia (Hubn.).*  
       *var. dubitans Walk.*  
 277. *sputatrix Grote.*  
       *Apamea ? insignata || Walk.*  
 278. *congermana Morr.*  
 279. *impulsa Grote.*  
       *Mamestra imp. Guen.*  
 280. *castanea Grote. 8*  
 280a. *albina Grote.*  
 281. *apamiformis Grote.*  
       *Xylophasia apam. Guen.*  
 282. *suffusca Morr.*  
 — 283. *arctica Boisd. Mich.*  
       *Mamestra amica † Harr.*  
       *Hadena amputatrix Fitch.*  
 284. *Bridghami G. & R.*  
 285. *vultuosa Grote.*  
       *rurea † Grote.*  
 286. *confederata Grote. 9*  
 287. *vulgivaga Morr.—*  
 + 288. *lignicolor Grote.*  
       *Xylophasia lign. Guen.*  
 289. *genialis Grote.*  
 290. *auranticolor Grote.*  
 9 — 291. *cuculliformis Grote.*  
 10 — 292. *vulgaris Grote.*  
       *Xylophasia vulg. G. & R.*  
 ♀ — 293. *verbascoides Grote.*  
       *Xylophasia verb. Guen.*  
 294. *sectilis Grote.*  
       *Xylophasia sect. Guen.*  
 295. *cariosa (Guen.).*  
 296. *inordinata Morr.*  
 ? — *Rastilia spm.*
297. *stipata Morr.—*  
 298. *leucoscelis (Grote.).*  
       *Polia leuc. Grote.*  
       *Dryobota fibulata Morr.*  
 299. *exornata Moeschl.*  
 300. *finitima Grote.*  
       *Apamea fin. Guen.*  
 301. *diversicolor Grote.*  
       *Demas div. Morr.*  
 ♂ ♀ — 302. *mactata Grote.*  
       *Apamea mact. Guen.*  
 303. *curvata Grote.*  
 304. *divesta Grote.*  
 305. *indirecta Grote.*  
 306. *turbulenta Grote.*  
       *Phosphila turb. Hubn.*  
 307. *marina Grote.*  
 ♂ ♀ — 308. *miselioides Guen.*  
 ♂ ♀ — 309. *modica Grote.*  
       *Apamea mod. Guen.*  
       *Cel. subcedens Walk.*  
 310. *flava Grote.*  
 311. *fractilinea Grote.*  
 § *Oligia Hubn.*  
 312. *arna Grote.*  
       *Celaena arna Guen.*  
 313. *chalcedonia (Hubn.).*  
       *Hadena fracta Grote.*  
 314. *versicolor Grote.*  
 315. *festivoides (Guen.).—*  
 316. *exesa (Guen.).—*  
 317. *paginata Morr.—<sup>10</sup>*  
 PERIGEA Guen.  
 ♂ — 318. *xanthioides Guen.*  
 319. *infelix Guen.—*

8 Allied to *rubritrena*; perhaps *albina* is a variety corresponding to the var. *Hercyniae* of *rubritrena*.

9 Also from Jamaica, W. I. (Thaxter).

10 The following names cannot be identified from published data concerning them: *Xylophasia* *indocilis*, *libera*, *arcuata*, *infixa*, *Hadena* *intracta*, *claudens*, *contenta*, *Miana* *vineta*, *Celaena* *punctifera*, *infecta*, *egens*, *erecta*, *irresoluta*, of the British Museum Lists; also *Apamea* *remissa* *Walk.*









74  
56  
N  
68

CHECK LIST  
OF THE  
NOCTUIDAE  
OF  
America, North of Mexico,

BY  
A. R. GROTE, A. M.

I.  
Bombyciae and Noctuelitae (Nontasciatae).

BUFFALO, N. Y.  
Reinecke & Zesch, Printers, 500 Main Street, near Mohawk.  
1875.

MYTHIMNA Ochs.

485. culea (Guen.).—

ZOTHECA Grote.

486. tranquilla Grote.

CALYMNIA Hubn.

487. orina (Guen.).

IPIMORPHA Hubn.

488. pleonectusa Grote.

489. intexta Harvey.

CLEOCERIS Boisd.

490. onychina (Guen.).—

ORTHOSTIA Ochs.

491. purpurea Grote.

492. crispa Harvey.

♂ ♀ - 493. bicolorago (Guen.).—

494. helva Grote.

495. ferrugineoides Grote.

*Xanthia ferr.* Guen.

*ab. spurcata* (Walk.).

496. ralla Grote.

*Xanthia ralla* G. & R.

497. euroa Grote.

*Xanthia puta* || G. & R.

*Xanthia euroa* G. & R.

498. perpurpurea Morr.—

499. differta Morr.—

500. disticha Grote.

?*Caradrina dist.* Morr.

501. posticata Harvey.

502. infumata Grote.

503. Belangeri Morr.—

504. insciens Walk.—

♂ - 505. chloropha (Hubn.).—  
*glauca andrews*

GLAEA Hubn.

506. viatica Grote.

507. decliva Grote.

♀ - 508. inulta Grote.

509. olivata Harvey.

510. tremula Harvey.

511. apiata Grote.

512. venustula Grote.

513. sericea Morr.—

514. pastillicans Morr.—

515. anchocelioides (Guen.).—<sup>15</sup>

JODIA Hubn.

516. rufago Hubn.<sup>16</sup>

EUCIRROEDIA Grote.

♂ ♀ - 517. pampina (Guen.).—

XANTHIA Hubn.

♂ ♀ - 518. togata (Esp.).—  
*Noctua silago* Hubn.

519. aurantiago Guen.—

SCOPELOSOMA Curt.

520. Pettiti Grote.

521. ceromatica Grote.

♂ ♀ - 522. Graefiana Grote.

523. devia Grote.

524. Morrisoni Grote.

♂ ♀ - 525. Walkeri Grote.

526. vinulenta Grote.

?*sidus* Guen.

SCOLIOPTERYX Germ.

♂ ♀ - 527. libatrix Germ.  
*Noctua lib.* Linn.

LITHOPHANE Hubn.

♂ ♀ - 528. disposita Morr.

529. petulca Grote.

*Xylina petrificata* † Guen.

530. ferrealis Grote.

531. signosa Grote.

*Xylina sign.* Walk.

<sup>15</sup> *Cerastis adulta* Guen. cannot be properly identified, being described from an unpublished figure.

<sup>16</sup> *Hopiorina hesperidago* Guen., cannot be identified from published data.

532. *oriunda Grote.*

♀-533. *Bethunei Grote.*  
*Xylina Beth. G. & R.*

534. *semiusta Grote.*

♂-535. *fagina Morr. \*

♂-536. *Georgii Grote. \*

♂-537. *cinerea (Riley). \*

538. *laticinerea Grote.*

539. *tepida Grote.*

540. *pexata Grote.*

541. *querquera Grote.*

542 *Thaxteri Grote.*<sup>17</sup>

*ANYTUS Grote.*

♂-543. *sculptus Grote.*

544. *capax (G. & R.).*

*CALOCAMPA Steph.*

♂-545. *nupera Lintn.*

♂-546. *cineritia Grote.*

♂-547. *curvimacula Morr.*

*LITHOMIA Hubn.*

♀-548. *germana Grote.*

*Calocampa germ. Morr.*

*LITHOLOMIA Grote.*

♂-549. *napaea Grote.*

*Scopelosoma nap. Morr.*

*XYLOMIGES Guen.*

550. *curialis Grote.*

551. *crucialis Harvey.*

552. *hiemalis Grote.*

553. *patalis Grote.*

554. *confusa (Hubn.).*

555. *mucens (Hubn.).—*

556. *phytolaccae (Abb. & Sm.).—*

*CLEOPHANA Boisd.*

557. *occata Grote.*

*CUCULLIA Schr.*

♂-558. *convexipennis G. & R.*

♂-559. *asteroides Guen.*

560. *postera Guen.*

561. *florea Guen.*

♂-562. *intermedia Spey. \*  
*Cuc. umbratica † Guen.*

563. *Speyeri Lintn.*

564 *laetifica Lintn.*

565. *serraticornis Lintn.*

566. *luna Morr.—*

*ADIPSOPHANES Grote.*

♂-567. *miscellus Grote.*

*CRAMBODES Guen.*

♂-568. *talidiformis Guen.*

*NOLAPHANA Grote.*

569. *Zelleri Grote.*

♂-570. *malana Grote.*

*Brachytaenia mal. Fitch.*

*ANOMIS Hubn.*<sup>18</sup>

♀-571. *erosa Hubn.*

*?fulvida Guen.*

572. *luridula Guen.—*

*PTERAETHOLIX Grote.*

573. *bullula Grote.*

*ALETIA Hubn.*

♂-574. *argillacea Hubn.*

*Noctua xylina Say.*

*Anomis bipunctina Guen.*

*?Anomis grandipuncta Guen.*

<sup>17</sup> The following names are not recognisable from published data: *Xylina multifaria*, *infructuosa*, *patefacta*, *spollata*, *commoda*, *?claufucta*, of the British Museum Lists.

<sup>18</sup> This genus resembles *Eucirroedia* in the color and cut of the wings. With the two following, to which it is allied in the prominent eyes and palpi and the fusiform, pyralidiform body, it appears to interrupt the continuity of the genera and its present position is provisional.

LITOPROSOPUS Grote.

575. *futilis* Grote.  
*Dyops fut.* G. & R.

EUTELIA Hubn.

576. *pulcherrima* Grote.

MARASMALUS Grote.

577. *ventilator* Grote.  
 ♂ ♀ - 578. *histrio* Grote.

INGURA Guen.

579. *abrostoloides* Guen.  
*?Edema producta* Walk.  
 580. *delineata* Guen.—  
 581. *praepilata* Grote.  
 582. *occulatrix* Guen.

CALPE Tr.

583. *canadensis* Beth.  
*Plusiodonta ? purpurascens* Walk  
*Oræsia sobria* Walk.

PLUSIODONTA Guen.

- ♂ ♀ - 584. *compressipalpis* Guen.

BASILODES Guen.

585. *pepita* Guen.

HEMICERAS Guen.

586. *cadmia* Guen.—

HYPHOSORPHA Hubn.

587. *hormos* Hubn.  
 588. *monilis* (Fabr.).

PHYPROSOPUS Grote.

589. *callitrichoides* Grote.  
*Sudariophora* <sup>19</sup> *nasutaria* Zell.  
*Doryodes acutalis* † Walk.

TELESILLA H.-S.

590. *navia* Harvey.  
 591. *cinereola* Grote.  
*Placodes cin.* Guen.  
 592. *vesca* Morr.—

BEHRENSIA Grote.

593. *conchiformis* Grote.

ABROSTOLA Ochs.

- ♂ - 594. *ovalis* Guen.  
 595. *urentis* Guen.—

PLUSIA Hubn.

596. *purpurigera* Grote.  
*Deva purp.* Walk.

- ♂ ♀ - 597. *aereoides* Grote.  
 ♂ ♀ - 598. *aerea* Guen.  
*Agrapha aerea* Hubn.

- ♂ ♀ - 599. *balluca* Guen.  
*Dyachrisia ball.* Gey.

600. *metallica* Grote.  
*Pl. bractea* † Grote.

601. *contexta* Grote.

- ♂ ♀ - 602. *Putnami* Grote.

603. *striatella* Grote.

604. *thyatiroides* Guen.

605. *formosa* Morr.<sup>20</sup>

*Leptina form.* Grote.

606. *mappa* G. & R.

- ♂ ♀ - 607. *bimaculata* Steph.  
*Pl. u-brevis* Guen.

- ♂ ♀ - 608. *biloba* Steph.  
 ♂ ♀ - 609. *verruca* (Fabr.).

610. *Dyaus* Grote.

- ♂ ♀ - 611. *precationis* Guen.

<sup>19</sup> This name is now shown by Prof. Zeller, to be derived from a character which is erroneously attributed to the species.

<sup>20</sup> Unknown to me since I described the species in 1868, when I indicated the difference in the length of the palpi; both this species and *thyatiroides* are apparently mimetic of the Bombyciae.

612. *laticlavata* Morr.—  
 613. *labrosa* Grote.  
 614. *monodon* Grote.  
 ♀ 615. *gamma* (Linn.).  
 616. *pseudogamma* Grote.  
 ♀ 617. *ou* Guen.  
 618. *fratella* Grote.  
 619. *u-aureum* Boisd.  
 620. *8-scripta* Sanb.  
 621. *viridisignata* Grote.  
 ♀ 622. *brassicæ* Riley.  
*Pl. ni* † Grote.  
 623. *oxygramma* Guen.  
*Autographa ox.* Geyer.  
 ♀ 624. *mortuorum* Guen.  
 625. *epigaea* Grote.  
 626. *ampla* Walk.  
 627. *diasema* Dalm.—  
 628. *pariphaeia* Grote.  
 629. *parilis* (Hubn.).  
 ♀ 630. *simplex* Guen. *synchl.*  
 631. *alticola* Walk.  
*Pl. ignea* Grote.  
 632. *Hochenwarthi* (Hoch.).  
*N. divergens* Fabr.  
 633. *devergens* (Hubn.).—<sup>21</sup>  
 ANARTA Ochs.  
 634. *crocea* Hy. Edw.—  
 635. *myrtilli* (Linn.).—  
*An. acadiensis* Beth.  
 636. *cordigera* (Thunb.).  
*An. luteola* G. & R.  
 637. *melaleuca* (Thunb.).—  
*An. bicycla* Pack.  
 638. *Kelloggii* Hy. Edw.—  
 639. *melanopa* (Thunb.).  
*An. nigrolunata* Pack.  
 640. *4-lunata* Grote.  
 641. *subfuscula* Grote.  
 642. *Schoenherri* Zett  
*An. leucocycla* Staud.  
 643. *Richardsoni* (Curt.).  
*An. algida* Lef.  
 644. *promulsa* Grote.  
*Mamestra prom.* Morr.  
 645. *nivaria* Grote.  
 646. *membranacea* Morr —  
 647. *lapponica* (Thunb.).—  
*An. amissa* Lef.  
 648. *Zetterstedtii* Staud.<sup>22</sup>  
 AGROTIPHILA Grote.  
 649. *montana* Grote.  
*Agrotis mont.* Morr.  
 LEPIPOLYS Guen.  
 650. *perscripta* Guen.  
 ACOPA Harvey.  
 651. *carina* Harv.  
 ACERRA Grote.  
 652. *normalis* Grote.  
 PLAGIOMIMICUS Grote.  
 653. *pityochromus* Grote.  
 STIBADIUM Grote.  
 654. *spumosum* Grote.  
 FALA Grote.  
 655. *ptycophora* Grote.  
 SCHINIA Hubn.  
 656. *trifascia* Hubn.  
 657. *rectifascia* Grote.  
 658. *gracilentia* Hubn.  
*?Sch. oleagina* Morr.  
 659. *media* Morr.—  
 660. *bifascia* Hubn.—

<sup>21</sup> The following species cannot be identified from published data: *Plusia flagellum*, *indigna*, *selecta*, *secedens*, of the British Museum Lists; *Plusia falcigera* and *rectangula* of Kirby; *Noctua omicron* of Linn.

<sup>22</sup> The following species cannot be identified from published data: *Anarta impingens*, *constricta*, *septentrionis*, *rigida*, of the British Museum Lists.

POLENTA *Morr.*

661. *Tepperi Morr.*—

CHLORIDEA *Westw.*

662. *rhexiae Westw.*

*Phalacna rhex.* Abb. & Sm.

663. *subflexa (Guen.)*.—

PORRIMA *Grote.*<sup>23</sup>

664. *sanguinea.*

*Oria sang.* Geyer.

?*Alaria volupia* Fitch.

ALARIA *Westw.*

665. *gaurae Westw.*

*Phalacna gaur.* Abb. & Sm.

RHODOPHORA *Guen.*

666. *florida Guen.*

DERRIMA *Walk.*

667. *stellata Walk.*

668. *Henrietta Grote.*

PIPPONA *Harv.*

669. *bimatrix Harv.*

TRICOPIS *Grote.*

670. *aleucis Harv.*

671. *chrysellus Grote.*

EULEUCYPTERA *Grote.*

672. *cumatilis Grote.*

TAMILA *Guen.*

673. *Meadii Grote.*

674. *nundina Guen.*

*Noct. nundina* Drury.

675. *tertia Grote.*

HELIOLONCHE *Grote.*

676. *modicella Grote.*

HELIOPHANA *Grote.*

677. *mitis Grote.*

HELIOSEA *Grote.*

678. *pictipennis Grote.*

ADONISEA *Grote*

679. *pulchripennis Grote.*

LYGRANTHOECIA *G. & R.*

680. *lynx Grote.*

*Anthoecia lynx* Guen.

681. *bina (Guen.)*.—

682. *brevis Grote.*

682a. *atrises Grote.*

683. *limbalis Grote.*

684. *arcifera Grote.*

*Anthoecia arc.* Guen.

685. *Spraguei Grote.*

686. *Packardi Grote.*

686a. *nobilis Grote.*

686b. *mortua Grote*

687. *jaguarina Grote.*

*Anthoecia jag.* Guen.

688. *Meskeana Grote.*

689. *tuberculum (Hubn.)*.—

690. *roseincta Harvey.*

691. *celeris (Grote).*

692. *saturata Grote.*

693. *Thoreani G. & R.*

♂ — 694. *marginata G & R.*

*Pyrallis marg.* Haw.

*Anth. rivulosa* Guen.

*Anthophila divergens* Walk.

*Euclidia designata* Walk.

*Microphysa contracta* Walk.

EUTRICOPIS *Morr.*

695. *nexilis Morr.*—

MELAPORPHYRIA *Grote.*

696. *immortua Grote.*

MELICLEPTRIA *Hubn.*

697. *villosa Grote.*

*M. pauxilla* Grote.

698. *diminutiva Grote.*

699. *persimilis Grote.*

700. *sueta Grote.*

<sup>23</sup> *Oria* *Hubner*, is used only for *musculosa*, originally, in the Verzeichniss. Geyer could not then use it for a species structurally distinct, nor Guenee restrict it to Geyer's species.

701. *californiensis Grote.*  
 702. *prorupta Grote.*  
 703. *venusta Hy. Edw. —*  
 704. *oregonica Hy. Edw. —*  
 705. *vacciniae Hy. Edw. —*  
 706. *fasciata Hy. Edw. —*

*HELIOTHIS Hubn.*

- ♂ — 707. *lucens Morr.*  
 708. *spinosae Guen.*  
*Anth. hirtella G. & R.*

709. *Crotchii Hy. Edw. —*  
 710. *phlogophagus G. & R.*  
 711. *luteitinctus Grote.<sup>24</sup>*

- ♂ ♀ — 712. *armiger Hubn. ♂*  
*Hel. umbrosus Grote.*

713. *lupatus Grote.*  
 714. *cupes Grote.*

*HELIOCHILUS Grote.*

715. *paradoxus Grote.*

*OXYLOS Grote.<sup>25</sup>*

716. *citrinellus (G. & R.).*

*AEDOPHRON Led.*

717. *Snowi Grote.*

*PYRRHIA Hubn.*

- ♂ ♀ — 718. *exprimens Grote. ♂*  
*Heliiothis expr. Walk.*

719. *angulata Grote.*  
 720. *illiterata Grote.*

*AXENUS Grote.*

721. *arvalis Grote.*  
 722. *ochraceus Hy. Edw. —*  
 723. *amplus Hy. Edw. —*

*ANNAPHILA Grote.*

724. *diva Grote.*  
 725. *depicta Grote.*  
 726. *decia Grote.*  
*amicula Hy. Edw.*  
 727. *arvalis Hy. Edw. —*  
 728. *lithosina Hy. Edw. —*  
 729. *germana Hy. Edw. —*  
 730. *mera Harvey.*  
 731. *danistica Grote.*  
 732. *immerens Harvey.*  
 733. *domina Hy. Edw. —*  
 734. *superba Hy. Edw. —*

*TRICHOTARACHE Grote.*

735. *assimilis Grote*

*TARACHE Hubn.*

736. *flavipennis Grote.*  
 ♂ ♀ — 737. *aprica Hubn.*  
*ab. biplaga Guen.*

738. *obatra Morr. —*  
 739. *terminimaculata Grote.*  
 740. *delecta G. & R.*  
*Acontia d l. Walk.*  
*Acon. metallica Grote.*

741. *lactipennis Harvey.*  
 742. *cretata G. & R.*  
 743. *patruelis Grote.*  
 ♂ — 744. *candefacta Hubn.*

745. *tenuicula Morr.*  
 ♂ ♀ — 746. *erastrioides G. & R.*  
*Acontia er. Guen.*

747. *angustipennis Grote.*  
 748. *crustaria Morr. —*  
 749. *(?) patula Morr. —*

<sup>24</sup> Size of *phlogophagus* and with the same ornamentation. It differs by the hind wings being clear yellow and having a very coarse discal lunule; the terminal band is black, interrupted as usual by the yellow ground color. Beneath yellow with the markings black and prominent, and with the terminal band on secondaries narrower than usual and faintly marked, being black only in a blotch above vein 1. Kansas, Prof. Snow, No. 51.

<sup>25</sup> This form differs by the fore tibiae being provided with two stout terminal inner spines succeeded by three spinules; and four shorter outer spines. The term "claw" has been heretofore apparently incorrectly used by me in this group. To distinguish the chelate appendages the term "claw" should be confined to those broad at the base, stout and curved, the stouter simple processes may be termed "spines", the finer ones "spinules".



GROTELLA Harvey.

750. septempunctata Harv.

CHAMYRIS Guen.

♂ ♀ — 751. cerintha (Treits.). ♂

EUSTROTIA Hubn.

752. olivula (Guen.). —

753. obaurata Morr.

754. synochitis (G. & R.).

♂ ♀ — 755. carneola Grote.

*Erastria carn.* Guen.

♂ — 756. apicosa Grote.

*Phytometra ap.* Haw.

*Erastria nigrifula* Guen.

*Miana undulifera* Walk.

757. albidula Grote.

*Erastria alb.* Guen.

♂ ♀ — 758. muscosa Grote.

*Erastria musc.* Guen.

759. musta Grote.

*Erastria musta* G & R.

760. mitographa Grote.

761. malaca Grote.

THALPOCHARES Led.

♂ ♀ — 762. concinnimacula Grote.

*Leplosia conc.* Guen.

763. mundula Zeller.

LITHACODIA Hubn.

♂ ♀ — 764. bellicula Hubn.

765. penita Morr. —

SPRAGUEIA Grote.

766. guttata Grote.

♂ ♀ — 767. leo Grote.

*Agrophila leo* Guen.

768. onagrus (Guen.). —

(var. praec ?)

769. dama Grote.

*Agrophila dama* Guen.

770. apicella Grote.

*Agrophila truncatula* Zell.

771. tortricina (Zell.).

772. fasciatella Grote.

XANTHOPTERA Guen.<sup>26</sup>

773. nigrofimbria Guen.

EXYRA Grote.

774. semicrocea Grote.

*Xanthop. semic.* Guen.

775. semiflava (Guen.).

776. Ridingsii (Riley).

*Xanthop. nigrocaput* Morr.

777. fax Grote.

PROTHYMIA Hubn.

778. coccineifascia Morr.

*Xanthoptera cocc.* Grote.

779. rosalba (Grote).

*Pr. rosaba* Morr.

780. subolivacea Harvey.

781. orgiae Grote

GALGULA Guen.

782. hepara Guen.

783. subpartita Guen.

*Galg. partita* Guen.

LEPIDOMYS Guen.

784. irrenosa Guen —

METOPONIA Dup.

785. obtusa H.-S.

*Met. obtusula* Zell.

786. perflava Harvey.

The following genera have been omitted on Page 10:

♂ ♀ — HYPPA Dup.

325½. xylinoidea Guen.

*Xylina contraria* Walk.

*Hadena anciscoconensis* Morr.

MORRISONIA Grote.

352½. evicta Grote.

352½. vomerina Grote.

352½. peracuta Morr.

<sup>26</sup> This genus is indicated by myself in January, 1873, when describing certain species now referred to *Prothymia*. At that time I restricted *Xanthoptera* to *nigrofimbria*, as the type, thus excluding the species now referred to *Exyra*.

I.

*On the Structural Characters of the Noctuae.*

Recent studies on the Noctuae have shown that a number of structural characters exist, which may be used to divide the species into genera. Some of these characters are noticed by Stephens in 1829; but we owe to Julius Lederer, in 1857, the more complete classification of the Family, and one which has become the basis of our knowledge on this subject. In May, 1874, I published a list of the North American species, classifying them as nearly as I could according to Lederer's method, which I had applied to many of the species in a number of papers previously published in various scientific journals.

The compound eyes are either naked (*Agrotis*, *Hadena* etc.) or their surface is studded with hair (*Mamestra*, *Anarta*, *Heliothrips* etc.). They are sometimes provided on the upper margin with long hairs (Wimpern); I have expressed this character by the translation "lashes". These lashes are easily confounded with the usually discolorous scales lying back of the compound eye, and, on occasion, I have made the mistake myself. The ocelli, or simple eyes, are present with but one exception in the North American *Noctuella* e. g., *Feralia jocosa*, but as they are absent in two or three European genera, according to Authors, they are not an invaluable character of the group; they are wanting in the small group *Noctuo* - *Phalaenidi*. The tibiae or shanks are either without spines over the joint, or they are provided with them; sometimes (*Adita*, *Oncocnemis*, *Dicopis* etc.) there is a terminal long claw at the end of the front tibiae; again there is a succession of spines ending in a claw, as in the genera allied to *Heliothis*. The vestiture of the thorax is sometimes massed in tufts in front and behind (*Mamestra*), sometimes plain (*Graphiphora* etc.), sometimes there is a small tuft behind the collar (*Croceigrapha*, *Xanthia* etc.); there is also a ridge of scales in some species now classed under *Agrotis*. The dorsum of the abdomen is often bare of tufts (*Agrotis*), or has merely a basal tuft, and again a succession of tufts (*Mamestra* etc.). The collar in front of the thorax is occasionally puffed up medially (*Cucullia*), but usually only feebly projected. The tuftings take on different shapes; *Plusia* has a spreading thoracic tuft, *Behrensia* a fan-shaped one on the abdomen centrally. Perfect specimens are needed to observe these characters and their full value is perhaps not yet established. The wings have the outer margin sometimes even (e. g. *Plusia*) sometimes uneven (*Scopelosoma*), rarely angulated (*Scoliopteryx*). The neuration is subject to feeble modifications. The primary cell is undivided, vein 5 usually nearer 4 than 6; there is almost always a small accessory cell, and there is a certain amount of variation in the position of veins 7 and 8. In the males of *Heliochilus* and *Pteraeothix* the neuration is aberrant. On the hind wings vein 7 has a peculiar position in the *Bombyctae*. In the male the secondaries are provided with a simple bristle, which in the opposite sex is compound; I have suggested that this bristle is a specialized vein. The clypeus or front of the head is usually smooth, sometimes with a projection (*Ochria*, *Arzama*), again with a cup- or heart-shaped depression (*Stibadium*, *Plagiomimicus*), in the genus *Fala*, these characters are apparently united; again the surface is roughened or tuberculate. The vestiture of the thorax is either scaly (*Jaspidea*, *Tarache*), or hairy (*Anarta*, etc.), or again consists of scales and hair; I have used this character to distinguish otherwise related genera as *Tamila* and *Heliothis*. As a rule the clothing of the body is more appressed and thinner in the Southern forms, more shaggy in the Northern. The three-jointed labial palpi show a slight variation in position, sufficient to give at times a generic character; in the sub-group *Fasciatae* the third joint is usually elongated; in the sub-group *Deltoides* the palpi are occasionally thrown backward over the thorax and disproportionately long. The antennae are setose or brush-like, simple, subpectinate or feathered, especially in the males;

in a few genera (*Renia* etc.) they possess a single tuft or coil of hair; in *Sylectra* they have a peculiar structure. The spiral tongue varies in relative length and stoutness. The ovipositor is sometimes extended (*Dianthoccia*, *Parastichtis*, *Graphiphora*), usually concealed.

## II.

### *On the Geographical Distribution of the Noctuae.*

Out of about twelve hundred North American species of Noctuae, less than thirty (if we except a few Arctic species) are considered identical with European forms. The degree of relationship is variously expressed. Some species are very nearly alike, so that a practiced eye is needed to distinguish the forms from the remote localities. Again the differences are more or less evident, while the great mass of the species admit of no very near comparison. These facts seem to point to a nearer common origin for certain American and European Noctuae, and it has even been suggested that the faunae have become separated by the submergence of an Atlantis. I think that the European and North American Noctuae are in part descended from species living over a common territory and that the Glacial Epoch has separated the stocks and, perhaps, induced local modification on either side of the Atlantic. The climate of the northern portions of the two continents is shown to have been much hotter during the Tertiary than it is at present. The species, not introduced by commerce, which are shown to be the same on both sides of the Atlantic, are, then, the unmodified descendants of pre-glacial species; just as I have suggested that the Alpine faunae of the White and Rocky Mountains are the relics of a fauna which followed the ice-wave back to the North during the opening of the Quaternary. The time may come when a phyllogenetic sketch of the species will be a possibility; at present we are only commencing to entertain the idea that species are phenomena of succession.

On the whole the species East of the Rocky Mountains and as far as Texas, have a common facies, nevertheless there is a gradual replacement as we go southward where the sub-groups *Fasciatae* and *Deltoides* become more prevalent. In the different genera there is room for interesting remarks already on the subject of their distribution; but the data are everywhere imperfect, the authority frequently doubtful, so that an exposition of the facts recorded as yet does not seem to offer probable conclusions. One interesting fact is here restated. All our Eastern species referred in this List, I believe correctly, to *Gortyna* Hubn. (non Led.), have a smooth front and are therefore not congeneric with the European *Ochria flavago* Hubn. which has a clypeal protuberance, and is the sole European species of its genus. But in California there is a second kind of *Ochria*, with a horned clypeus, named by me *Ochria Suazalatae*, and discovered by my friend Mr. JAMES BEHRENS. This Californian species resembles in ornamentation the Eastern species of *Gortyna* with smooth fronts, and does not resemble in this respect its European congener. And there is a single North American *Gortyna* from the East, with a smooth front, *Gortyna cataphracta*, which resembles in ornamentation the European *Ochria flavago* which has a horned clypeus. This opens up the questions of the value of structural characters, and the relation of structure to habit; for the horned clypeus doubtless is correlated with the habits of the moth. Is it possible that the hornless *Gortyna cataphracta* is genetically more immediately connected with the horned *Ochria flavago*, than is the horned Californian species which we now more intimately associate with the European form?

Such inquiries are beyond the limits of my present space, nor can I suggest as yet but few of them. But I am glad to show there are questions of general import suggested by these smaller animals, and that the study of Entomology is wider than the mere whims of collectors of insects.

### III.

## Notes and Descriptions.

### *Trigonophora V-brunneum* n. s.

This is Guenee's var. A of *periculosa*. It differs by the median v-shaped space being of an intense, contrasting, velvety brown and also somewhat broader in figure. The transverse posterior line is denticulate on vein 2, and submedian fold, where it is straighter in *periculosa*. Beneath the line on hind wings is more uneven. Else very similar, while darker than its ally; the subterminal line more even, with a darker preceding shade about vein 7. Hab. Canada, Mr. Norman, Mr. Kuetzing; New York.

### *Pachypolia acutissima* n. s.

♂. Antennae shortly pectinate; eyes naked, tibia unarmed; dorsum of the abdomen feebly tufted at base. Resembles in appearance *Mamestra imbrifera* Grote, or rather *Pachypolia atricornis* Grote, but differs from all the large black and white Noctuidae known to me as well as from two of Mr. Morrison's descriptions under *Polia*, by the medially finely, acutely and deeply dentate transverse posterior line. Black and white. Lines black edged with pure white; ground of the wing blackish; no other shades. A fine basal black dash and one below it. T. a. line with the terminal inflection acutely prolonged. Claviform a broad space surrounded by a fine, somewhat rounded black line. Orbicular oblique, large, white with dark centre, projected inferiorly towards the reniform; the latter upright, of the usual shape, like the orbicular in color. T. a. line perpendicular, geminate, narrow superiorly, black with white center, acutely and deeply dentate opposite the cell, with a marked projection inwardly on submedian fold. Subterminal line white, its inward dentations preceded by black marks. Subterminal space and terminal space before the margin shaded with whitish, gray in appearance. Fringe fuscous, dotted with white at the tips of the veins. Hind wings and abdomen dark fuscous; beneath pale, somewhat ochery; on hind wings an irregular dentate line and an outer even shade line; discal spots lunate, black; fore wings mostly fuscous with a reflection of the dentate t. p. line. Collar and front with a black line; tegulae obsoletely black lined; legs dotted. Wider winged than *P. atricornis* Grote. *Expanse* 44 m. m., Mr. Kuetzing, Montreal, from whence also I have *Agrotis pressa* Grote (*Eurois pressus*).

### *Dryobola stigmata* n. s.

♂. Color of *subjuncla*, and with a resemblance to *thalassina* and *didyma* of Europe. Eyes naked and distinctly lashed. Head and thorax blackish brown with a black line on the front and collar; tufts and thorax touched with a red brown. A black basal line and a faint line on submedian fold across the median space. T. a. line even, with a tooth on submedian vein. Claviform small; orbicular angulate, concolorous, a black line above it to collar. Reniform contrasting, greenish white, vague, with an inner dark annulus; t. p. line dentate opposite the cell, curved inwardly below vein 3; s. t. line faint, pale, without W-mark; terminal space blackish. Median space shaded with red brown. Hind wings dark fuscous; be-

neath paler with faint double lines and on primaries an annulus in place of the usual solid spot; on hind wings the spot is small and solid. *Expanse* 36 m. m. Montreal. Mr. C. W. Pearsons.

I have examined the unset specimen sent me as the type of *Dryobota fibulata* by Mr. Morrison. The eyes are unlashd and I would refer the species to *Hadena*; however I could find no essential differences between it and my *leucoscelis*, which I have originally, very probably incorrectly, referred to *Polia*.

### *Hadena interna* n. s.

♂. Closely allied to *derasatrix*, and resembling some of the darker suffused specimens of that species, but smaller, and distinct by the coarse of the pale, yellowish subterminal line which runs strongly obliquely inwardly above internal angle, forming a well marked suins. Blackish, all the markings obscured. The pale s. t. line preceded by a black interrupted linear shade; terminal black dots large inferiorly. Hind wings very dark, blackish, paler at base with indistinct lunule and median shade; the pale interruption at anal angle *unusually* prominent. Beneath with a *broad* black discal mark and double exterior shades on hind wings; the color is blackish with internal region of primaries and disc of hind wings paler. Thorax and head and appendages blackish; abdomen fuscous above, blackish beneath. *Expanse* 36 m. m. Chicago, Prof. Westcott, No. 434.

### *Hadena cuculliformis* n. s.

♂. Allied to *vertascoides*, and especially like *Cucullia* in the black tuftings of the center of the thorax descending over the dorsum of abdomen, and in the shape of the wings which are narrower than in any of the allied species. Pale brown with obliterate markings and the interspaceal deeper brown shadings paler than usual. The t. p. line is visible above internal margin as a white, sinuate (not inwardly arcuate as in *terbascoides*) streak, followed with a dark shade. No traces of subterminal line. Hind wings and under surface paler than its ally. *Patagia* deep brown with shaded margins; head and collar paler, latter with a dark line. The moth expands 42 m. m. and has been sent to me by my kind friend Mr. James Behrens, as taken at Sauzalito, Cal., May 11th, (No. 1016).

### *Hadena ancocisconensis* Morrison.

The unset ♀ type of this species, described as from "Glen Valley, Mt. Washington, N. H.", has been sent to me by Mr. Morrison for examination. It is the common *Hyppa xylinoides* of Guenee, already redescribed by Walker as *Xylina contraria*. The extraordinary specific name, taken from Harris' *Cicindela anc.*, is irrelevant. In different papers, regarding the White Mountain faunae, I have taken the ground that it was "unsafe" for Mr. Morrison, with his knowledge of the subject, to describe new species from that region. I instanced *Agr. islandica*, redescribed by him as *opipara* Morr. The present instance additionally vindicates my expression and justifies my criticism.

### *Cucullia laetifica* Lintner (n. s.).

Closely allied to *C. Speyeri*. The anterior wings are narrower and less curved antepically than in that species; they are of a paler gray shade. The subobsolete reniform and orbicular spots are marked with ochraceous-yellow dashes; a streak of

the same color resting on the subcostal nervure at its base and another within the inferior teeth of the anterior transverse line. This line is more acutely toothed than in *Speyeri*. The oblique black streak on cell 1 b, is faintly bordered above with ochraceous-yellow; the two small teeth of the posterior transverse band, which are divided by the median fold, are of nearly equal length, while in *Speyeri* the one below the fold is much the longer; between these teeth and the opposed tooth of the anterior transverse line is a white spot, resting on the fold and reaching nearly half-way to the nervure on each side. Terminal margin, lined distinctly with black, interrupted by the nervules.

Posterior wings hyaline, with a very narrow lustrous brown border, and nervules covered with brown scales, cilia white.

Expanse of wings 1.90 m. Length of body exclusive of anal tuft .80 m.

Described from a ♂ received from Bastrop, Texas, and in the collection of Mr. Otto Meske of Albany.—*J. A. Lintner*.

*Agrotis fenisea* Harvey (n. s.).

♂. Three male specimens from California, received by the Buffalo Society of Natural Sciences from Mr James Behrens, belong to a new species allied to *fuscigera*. The color and markings of the fore wings of the species are closely similar, but the hind wings are pure white in *fenisea*, reflecting the discal spot from beneath, and with white fringes and a broken black terminal line. The antennae are more lengthily ciliate, brushlike, sub-pectinate. From *Rileyana*, the new species differs by the concolorous stigmata.—*L. F. Harvey*.

*Agrotis carissima* Harvey (n. s.).

♂. Allied to *formalis*. Head, thorax, fore wings and body beneath stained of a reddish purple over fuscous. Veins marked with blackish. Lines obsolete, geminate, marked by included paler tint. Stigmata obsolete. Collar with a jet black contrasting band. Beneath the wings are blackish, irrorate; hind wings paler with line and small discal mark. California. Expanse 34 m. m.—*L. F. Harvey*.

*Charadra decora* Morr.

I learn from the Author that this species is incorrectly described as Californian; it is therefore excluded from this List.

*Metalepsis* n. g.

This genus is equivalent to *Pachnobia* of v. Heineman but not of Guenee, whose type, as I have elsewhere shown, is *carnea*. Eyes naked, with *lashes*. Fore tibiae unarmed, middle and hind tibiae spinose. Habitus of *Orthosia*. The European *rubrica* belongs to this genus and the type is the Californian *Pachnobia cornuta* Grote.

*Spragueia* n. g.

In the European *Erotyla sulphuralis* veins 7 and 8 of the fore wings are fused at base, 8 out of 7 well beyond the closure of the accessory cell. Our species hitherto referred to *Erotyla* differ in the their narrower primaries, the costal and internal

margins nearly parallel. In the type of the new genus, *leo*, veins 7 and 8 spring independently from the extremity of the cell. I have examined the neurulation of *fasciatella* and it agrees; I do not see then any ground for separating the two species *lortricina* and *fasciatella* from the spotted species *dama* and *onagrus*. Named for my friend Henry S. Sprague of Buffalo.

*Exyra Grote.*

In this genus the cell is closed; the accessory cell elongate, 7 and 8 on a very short stalk from the extremity of the cell. The wings are broad, the body hairy and the thorax moderately rough. The type is *semicrocea*, the larva of which feeds on *Sarracenia* and has been ably studied by Professor C. V. Riley.

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*Explanation of Plate.*

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Figure 1, *Apatela funeralis*.

“ 2, *Apatela lithospila*.

“ 3, *Lithophane Thaxteri*.

“ 4, *Acerra normalis*.

“ 5, *Homohadena badistriga*.

Figure 6, *Behrensia conchiformis*.

“ 7, *Agrotis pressa*.

“ 8, *Pachypolia atricornis*.

“ 9, *Pachypolia acutissima*.

“ 10, *Cucullia serraticornis*.

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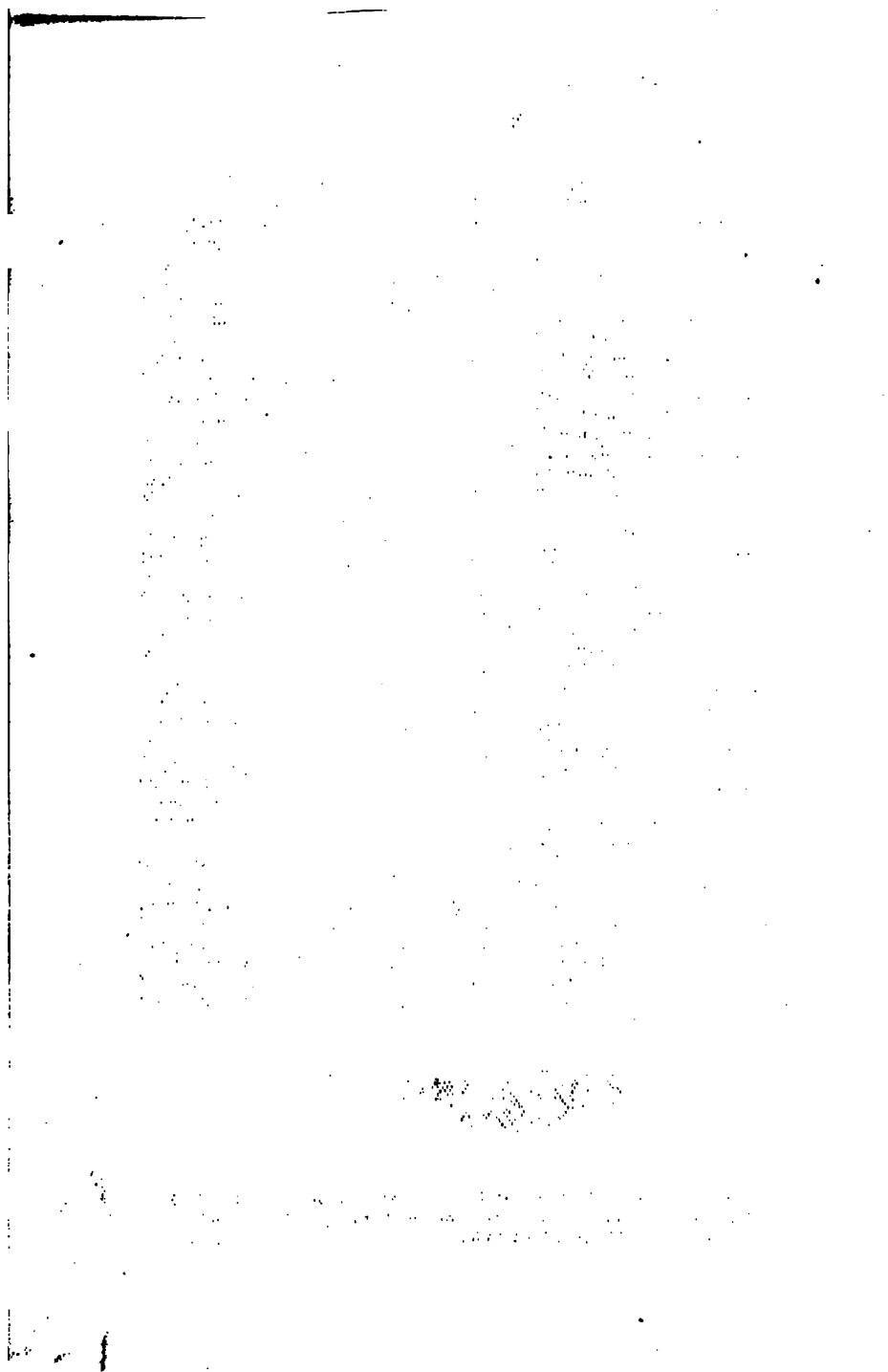


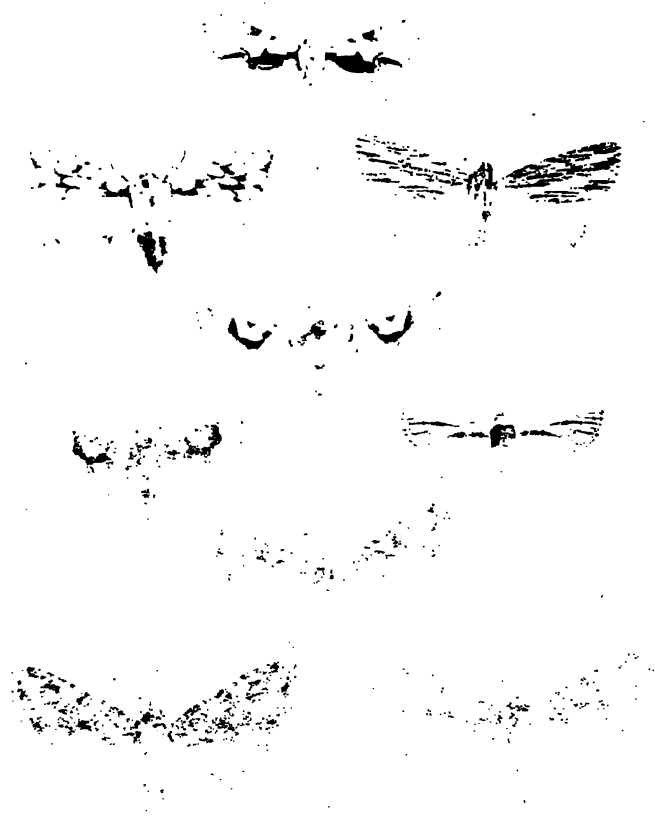
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500 Main Street, BUFFALO, N.Y.









CHECK LIST  
OF THE  
NOCTUIDAE  
OF  
America, North of Mexico,

BY  
<sup>us. vetus</sup>  
<sup>adcliffe</sup>  
A. R. GROTE, A. M.

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II.  
Noctuelitae (Fasciatae), Deltoides and Noctuo-Phalaenidi.

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1860

One of my critics, who not unfrequently misrepresents me, charges me among other things with following Mr. Scudder blindly. And, although the language used by my critic is unreasonably strong, there seems at first sight some probability that it is in the main true. And in this case the question is whether Mr. Scudder is not an Entomologist whom one can afford to follow, not exactly blindly, but in matters where one's own especial information gives out. And, while for my part I have fully satisfied myself that this is the case, I wish here to show, with regard to the Noctuidae, what I have in fact done. Obviously this criticism refers to the multiplicity of genera adopted by Mr. Scudder in the Diurnals. But it can be easily shown that I have used an already sufficiently tested class of characters for my genera in the Noctuidae. I have simply tried to bring our Noctuidae into generic correspondence with the conceptions of Lederer. So that the European Lepidopterist, for instance, may be sure that my *Mamestras* have hairy eyes, unarmed tibiae and a tufted body, my *Agrotis* armed tibiae, naked eyes and tufted



body, and so on. Genera in my List not represented in Lederer, are considered, in the absence, perhaps, some times of more accurate information, to be peculiarly American, and these genera are founded on variations of structural characters recognised by the best authorities as of generic value. In other words these genera would for the most part be accepted as valid did European authors, who in the main were governed by the ruling classificatory ideas, discuss them. And this seemed important to me because I am chiefly impressed with the value of the results to be obtained from a comparison of our Moths with those of Europe, for I have elsewhere said that any question which tends to throw light on the origin of species is the one to be discussed and the one for which sacrifices are to be brought by scientific men. And for my general procedure I have already seen some gratifying results, gratifying to one who works for such results as a sufficient reward. While an uninterrupted sequence of form seems to be necessarily contradicted by the conditions of the evolutionary hypothesis itself, we may still expect that a comparison of two separate faunae, once connected in geological time, will throw some light on the origination of species belonging to the same structural group.

And again, my idea that we should respect priority, has been construed into a "blindly following of Mr. Scudder". But my mind has undergone no change on this score since the time when I first wrote, which was before Mr. Scudder took up the public study of the Lepidoptera. The fact remains that I recognised Hubner's authority so soon as I became acquainted with his works, and I adopted his genus *ANSOTA* in 1864. I have, however, followed Mr. Scudder in adopting the "Tentamen" as authority; and since doing so I am confirmed in it, because the case of those who wish to make out that it should be thrown on one side, seems to be a bad one. They have to prove first that the best way to treat a man who deliberately prints an entirely new system, with entirely new names, in themselves entirely unobjectionable, is to ignore him on technical grounds. In other words the desire is to adopt Hubnerian ideas and give the credit to other writers. This is in so far as Hubner's ideas are consonant with the ideas of these latter. And where the multiplicity of genera comes into question, I freely concede that those who admit but few genera may advance their own argument on its merits as against Hubner and any one else. But I deprecate their mixing up of the two sets of ideas. I should prefer to hear arguments first against recognising Hubner as having any right to be quoted for any names of genera (or for species for that matter); and then arguments against his ideas as to classification and as to what constitutes genera or species. Hubner's species seem to be generally recognised, thanks to the manner in which they are portrayed; and to a defect in his manner of defining genera we are in some degree to attribute the fact that the same general recognition has been withheld from these. Since, as I have elsewhere urged, what we want is information on the subject of Entomology, and not a confusion of ideas, the test of Hubner must be ultimately his ability to assist us, and as to whether we cannot use his generic terms by applying to them the existing Canons of nomenclature. That the Hubnerian ideas as to genera being in reality far more numerous than was recognised at the time they

were put forth, are proved correct, admits of hardly a doubt to those who have studied the progress of science. That his practical application of these ideas in his Verzeichniss was incomplete, is admitted. But I have shown that from the very nature of that work it could not well have been different. For Hubner did not know many of the species he classified and the true criticism to be applied is to see how he treated those genera which he presumably was well acquainted with, viz: the European. And, as a whole, his incongruous genera are largely those in which he has attempted to intercalate extra-European forms. And if this is so, it will detract much from the argument of those who criticise Hubner's genera on account of their want of homogeneity. But in some degree also Hubner's genera are criticised by those who can be plainly shown to have no facility in recognizing or describing structure in Entomology; and indeed this criticising of Hubner is seen to come perhaps mainly from such sources. So that after all the question comes up as to the value of the critics that reject Hubner, and since we must desire to know the best written on any subject and not the worst, it may happen that Hubner will still be recognised when some of his critics are forgotten in this particular; for the test of Hubner is his real value on his subject and not the artificial value conferred by the law of priority in nomenclature, and which still obliges us to study incompetent writers whose works may, perhaps, finally lead to the modification of the law.

But we are asked to ignore Hubner because Treitschke and Boisduval have done so. And here again, the true question is as to whether these authors were right in appropriating, misapplying or rejecting Hubner's names; and this question must be answered satisfactorily before we may join them. Finally with regard to the Tentamen, it has been urged that Hubner himself discarded it. But this is a mistaken criticism; Hubner's Verzeichniss rests on the Tentamen, but it seems that afterwards Hubner used the names of the Tentamen for divisions higher than genera, and if these divisions cannot be accepted, his names must stand in their original significance.

A fatal want of discernment has allowed Mr. W. H. Edwards, in the Can. Ent. for March of this year, to compare Hubner's catalogues with those of vendors of flower seeds, whereas Hubner's works take their value not from their form, but their contents. And in regard to the "peritis ad inspiciendum et dijudicandum," what is all scientific work but tentative? Whether we call our works Tentamens or not, they are, perhaps all, "communicated to skilled persons to be examined and pronounced upon." So that it is unreasonable to detract from Hubner's work on the ground that he regarded it as provisional and suggestive rather than final. Nor can Hubner's modest attitude prevent our using of his work what we may, and certainly it should afford no excuse for our ignoring his labors *in toto*. And we can see that Hubner's descriptions of genera are at least no worse than that of the genus AENIGMA Strecker, which is based upon a "very large number of sub-costal nervules" an impossible character, and a mistake to which none of Hubner's works offer a parallel. Nor did Hubner misrepresent any one, for purposes of personal envy and malice; he is singular for his devotion to his subject, and for his consistency in his presentation of it. And

we may contrast Hubner's consistency with that of Mr. W. H. Edwards, who adopts all of Mr. Scudder's genera in the Hesperidae, but rejects the same ideas in other families. Again Dr. Hagen says that "the Tentamen was not known to the chief Lepidopterologist of his day for ten years or more. after it was printed, though he was in communication with Hubner, and that he did not know it shows clearly that Hubner did not think it of importance enough to be communicated to him".

One may admire this conclusion without appreciating the critical power that brings it out. In the first place it is assumed that Ochsenheimer was the "chief Lepidopterologist of his day." One may, indeed, and reasonably prefer Hubner, since Ochsenheimer at best, while conservative, was at the same time provincial from the limit of his studies. Ochsenheimer's third volume was printed in 1810, and not in 1816 as Mr. Edwards asserts. So that Dr. Hagen's ten years of Ochsenheimer's ignorance are reduced to four. Again why, in his fourth Volume does Ochsenheimer adopt genera from the Tentamen such as "COSMIA" and "XYLENA"? And why does he throughout quote Hubner's Tentamen in the synonymy if he did not recognise the Tentamen as of authority? Information spread slowly in those days and the true criticism of Hubner's course in the delay is probably not Dr. Hagen's idea that he considered the Tentamen worthless. For, otherwise, Hubner would not have printed it; or, printing it, he would not have communicated it to Ochsenheimer *at all*, neither would he have used it himself, which he clearly did, as the basis of all his subsequent work. And then again we can see that Mr. W. H. Edwards quotes Ochsenheimer to suit himself and his side of the case. For Mr. Edwards italicises Ochsenheimer's remark: This sheet (the Tentamen) I saw long after the printing of my 3rd Vol. was done," and comes to a stop. *But Ochsenheimer comes to no stop!* He goes right on: "therefore I could not earlier have adopted anything out of it" (daher konnte ich frueher nichts davon aufnehmen). And this unfair omission of Ochsenheimer's apology, for a previous neglect of Hubner, must be rectified before we can understand that the blame does not rest with Ochsenheimer, for rejecting Hubner's work. No, it is with Treitschke, Ochsenheimer's narrower disciple, and with Boisduval, who afterwards wrote of "mon genre" at Hubner's expense. For Ochsenheimer adopts the Tentamen in great part, although he misapplies certain names such as GRAPHIPHORA, which he makes synonymous with AGROTIS in part. And we see that all the criticism which excuses our rejection of Hubner because Ochsenheimer refused him, is false, and must fall away, together with Mr. Edwards' erroneous dates. And with it will go all of Dr. Hagen's reasoning as to Hubner's Tentamen not being cited in certain Booksellers' Catalogues; unless, again, the refusal or the failure of a bookseller to advertise a work is to be considered to invalidate its publication.

So that we shall have reason to reject a criticism which is founded on a misconception alike of Hubner's work and of the circumstances attending its publication, a criticism to which Dr. Hagen supplies the literary information, Mr. W. H. Edwards the legal argument, and Mr. Strecker the bad language. As the sum

and substance of the foregoing and elsewhere published remarks we claim: That Hubner never rejected the Tentamen, but used it as the basis of his subsequent classifications, and that he communicated it to his fellow students of that day. That Ochsenheimer adopted the Tentamen as of authority, and that he had a copy, not *ten* years, as Dr. Hagen states, but about *four* years after its publication. And finally that the only way to secure a basis for our nomenclature under the law of priority is to adopt all of Hubner's tenable genera. The idea of injustice to subsequent writers, mooted by Mr. W. H. Edwards, has no basis in fact, there is in reality no personality involved in the matter of bestowing names beyond what we perforce import into it. And whoever has renamed any of Hubner's genera should in equity be the first to desire to reinstate the authority he has either endeavored to set aside, or whom he has ignorantly replaced for the moment.

The result of the continued rejection of Hubner, upon the synonymy of the Lepidoptera, will be constantly to confuse it still more, for there must succeed Authors who will see that under the law of priority Hubner's names must be reinstated in their undoubted right. And the successors to the present *lumpers* (as we have called them) tempted to tend more and more to become *splitters* by our ever encresing knowledge, may retain sufficient tradition to continue to fight against Hubner and thus may re-name more of his genera. So that there will be more entanglement and dissonance than ever and we may be induced, as Professor Morse has been in his First Book of Zoology, to fall back on English names for our species. And this alternative is not a pleasant one, nor is the other, that the law of priority may be altered so as to apply it against certain authors rather than against certain epochs; for then it would assuredly be brought to bear inimically against Mr. Strecker and other incompetent writers, and so it may well happen that the Story of Haman be repeated, with writers of Mr. Strecker's stamp themselves hanging on the gallows, they have been at so much pains to erect for Hubner. But for us the claims of all writers on Entomology continue subservient to the good of the science, and if this latter is threatened we will drop even Hubner and, in the same way, we would drop all further assertion of ourselves. But to convince us of this, some other arguments must be used than Dr. Hagen's statement, that booksellers of his time did not advertise the Tentamen, than Mr. W. H. Edwards' fatal period in the middle of Ochsenheimer's famous sentence with regard to Hubner's Tentamen, than Mr. Strecker's undoubted capacity for abuse and for misunderstanding the simplest facts of structure in insects.

However it may eventuate with the Tentamen, it is clear that, if we reject the Verzeichniss, we shall have to re-name many genera established under Hubner's names, unless we agree that the adoption of any of Hubner's names is optional, in which case we can adopt his names (as Guenee has done for instance with regard to *Anthracia*) without the slightest reference to the species composing his genera. The confusion would only be heightened by such procedure. And clearly to such generic titles we cannot quote Hubner as authority.

Certain of the following names are used in this Check List and are taken from the Tentamen, and are here given with Ochsenheimer's use of them, in 1816. Ochsenheimer quotes the Tentamen, not the Verzeichniss. For the argument as to the probable issue of the latter I refer the reader to Mr. Scudder's Historical Sketch of the Generic Names proposed for Butterflies pp. 97—8. I have elsewhere noted a want of correspondence between the Zutraege and the Verzeichniss.

DIPHThERA.

1806. Hubn., Tent.: *aprilina* (Orion). Only species and therefore type.  
This name is since incorrectly credited to Ochsenheimer, though the latter quotes Hubner, correcting at the same time Hubner's mistaken identification of *aprilina*. Orion must be taken as the type. For *ludifica*, referred to *Diphthera* by Lederer, *Trichosea Gr.*, must be used.
1816. Ochs., 4, 63, *coenobita*, *ludifica*, *orion* (*aprilina*).

MOMA.

- 1816 Hubn., Verz. 203, *ludifica*, *aprilina* (*orion*), *astur*. *Astur* is the type, since the restriction to *orion* by Herrich—Schaeffer and Lederer cannot be followed.

APATELA.

1806. Hubn., Tent.: *aceris*; sole species and therefore type.
1816. Ochs., 4, 62, refers *aceris* (Fam. B.) with 13 other species to the genus *Acronica*, and cites Hubner's *Apatelae* as synonymous. Afterwards the name *Apatela* is credited to Stephens or Ochsenheimer.
1875. Grote, Bull. Buff. Soc. Nat. Sci., 2, 213. Refers the N. Am. species, hitherto placed under *Acronycta* to *Apatela*, with *aceris* as type.

ACRONICTA.

1816. Ochs., 4, 62: *leporina*, with 13 other species. This name must be credited to Ochsenheimer.
1816. Hubn. Verz., 201. Restricts the term to *leporina* and *bradyporina*.
1874. Grote, List Noct., 7: takes *leporina* as the type. Afterwards shows that, in case of a disintegration of *Apatela*, this type must be retained for *Acronycta*.

JASPIDIA.

1806. Hubn. Tent.: *Spoliatricula* (algae), only species and therefore type.
1816. Ochs., 4, 63. Adopts *Poecilia* Schr., for *glandifera* and eight other species including Hubner's type, and cites Hubner's name as synonymous. The term is afterwards incorrectly used by Boisduval for *celsia*.
1874. Grote, 6th Peab. Rep., 24, states, on Treitschke's authority, that *Poecilia* is preoccupied (Tr., 5, 1, 57, for a genus of fishes), and adopts *Jaspidia*, over the later *Bryophila* Tr., criticises Boisduval's use of "*Jaspidea*" for *celsia*, which latter is the sole species and therefore type of *DiaCOPE* Hubn. Verz. 204.

AGROTIS.

06. Hubn., Tent.: segetum. Only species and therefore type.
16. Ochs., 4, 66: *rectangula*, and 42 other species. among them Hubner's type. The name is afterwards erroneously credited to Ochsenheimer or Treitschke and even to Boisduval.
74. Grote, List Noct., 9: takes *segetum* as type and credits the name, as Ochsenheimer does, to Hubner.

GRAPHIPHORA.

06. Hubn., Tent.: *gothica*. Only species and therefore type.
16. Ochs., 4, 68: *ravida*, and 16 species not separable from *Agrotis*. Henceforward the name is credited to Ochsenheimer, who apparently includes Hubner's type incorrectly under *Episema* with dissimilar species. but cites Hubner to *Graphiphora*. Unless it can be shown, which I think it cannot, that Hubner's identification is erroneous, this name must stand instead of *Taeniocampa Guen.*
75. Grote, Bull. Buff. Soc. N. S., 217: adopts *Graphiphora* for the N. Am. species hitherto referred to *Taeniocampa*, with *gothica* as type.

GORTYNA.

06. Hubn., Tent.: *micacea*. Only species and therefore type.
16. Ochs., 4, 82: Without citing Hubner, uses it for *micacea* and *flavago*. Afterwards the name is credited to Ochsenheimer or Treitschke. Guenee afterwards designates *micacea* as the type of *Hydroecia* which must fall. In the Verz. Hubner proposes *Ochria* for *flavago* alone, and this name has precedence over Lederer's restriction of *Gortyna* to the same type.

GLAEA.

06. Hubn., Tent.: *vaccinii*. Only species and therefore type. This name is afterwards adopted by Stephens.
16. Ochs., 4, 84: includes Hubner's type under *Cerastis* (preocc. ?) and refers to *Glaea* in synonymy.

XYLENA.

06. Hubn., Tent.: *lithoxylea*, only species and therefore type. The name falls before *Hadena*
16. Ochs., 4, 85: *vetusta* and 29 other species. Cites Hubner in adopting name and includes his type. The genus is now perhaps more incongruous than any of Hubner's, in the Noctuidae, e. g. it includes species of *Lithomia*, *Calocampa*, *Hadena*, *Actinotia*, *Dipterygia*, *Chariclea*, *Calophasia*, *Asteroscopus*, *Scotochrosta*. Afterwards the name is credited as "*Xylina*" to Ochsenheimer or Treitschke, and by restriction comes to be used for a genus of which *socia* (*petrificata*) may be considered a type. and falls before *Lithophane*.

LITHOPHANE.

1816. Hubn., Verz. 242: petrificata and four other species.  
1874. Grote, 6th Peab. Rep. 31: takes socia (petrificata) as type and refers Graptolitha Hubn. as synonymous or to be used in a subgeneric sense only.
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I return my thanks to Mr. Lintner, Mr. Meske, Mr. Behrens, Prof. Peabody, Prof. Snow, Mr. Hy. Edwards, Mr. Roland Thaxter, Mr. Graef, Mr. Saunders, Prof. Packard and others who have kindly helped me in my studies. Mr. Burgess has been so good as to consult for me the Library of the Boston Society of Natural History. Mr. Chas. A. Blake has been of great assistance to me and Mr. Scudder and Prof. Riley have my thanks. I am glad to acknowledge my indebtedness to Professor P. C. Zeller, Dr. A. Speyer and Mr. H. B. Moeschler for suggestions and specimens.

*The Buffalo Society of Natural Sciences,*

A. R. GROTE.

May 1st, 1876.



# CHECK LIST

OF

*North American*

Noctuelitae (Fasciatae), Deltoides and Noctuo-Phalaenidi,

BY

AUG. R. GROTE, A. M.

## NOCTUAE.

Noctuelitae Latr.

790. *adversa* Grote.

FASCIATAE Borkh.

EUCLIDIA Hubn.

DRASTERIA Hubn.

♂♀ — 791. *cuspidata* Guen. ♂  
*Drasteria cusp.* Hubn.

♂♀ — 787. *erecta* Hubn. ♂

792. *capitcola* Walk.—

*Phalaena erecta* Cram.

793. *petricola* Walk.—

♀ *Phalaena spadix* Cram.

♀ *Drasteria mundula* G. & R.

GRAMMODES Guen.

*Ophiura crassiuscula* Wood.

794. *Smithii* (Guen.).—

*Microphysa sobria* Walk.

795. *similis* (Boisd.).—

*Poaphila narrata* Walk.

796. *consobrina* (Guen.).—

*Poaphila amplissima* Walk.

PANULA Guen.

var. *agricola* G & R.

797. *inconstans* Guen.

♂♀ — var. *ochrea* Grote. much  
summer brood (gen. II).

798. *remigipila* Guen.—

787a. *erecta* Guen.

LITOCALA Harvey.

spring brood (gen I).

799. *sexsignata* Harvey.

788. *caerulea* Grote.

*Lita* † *sexs.* Harv.

LITOSEA Grote.

SYNEDA Guen.<sup>1</sup>

♂♀ — 789. *convalescens* Grote.  
*Drasteria conv.* Guen.

800. *graphica* (Hubn.).

var. *media* Morr.—

<sup>1</sup> *Syneda grafica* has spinules at the extremity of the fore tibiae and must be considered the type of the genus. Hubner's figure has the hind wings too highly colored.



801. hudsonica G & R.	STICTOPTERA Guen
802. divergens Behr.	823. divaricata Grote.
803. adumbrata Behr	
804. Howlandii Grote.	PARTHENOS Hubn.
<i>S. Stretchii</i> Behr.	♂ ♀ — 824. nubilis Hubn.
805. ingeniculata Morr.—	CATOCALA Schrank.
806. socia Behr.	♂ ♀ — 825. <u>epione</u> Westw. —
807. ochracea Behr.	<i>Noctua epione</i> Drury.
808. Edwardsii Behr.	826. <u>sappho</u> Streck.—
809. tejonica Behr.—	827. <u>agrippina</u> Streck.
810. nubicola Behr.—	♂ ♀ — 828. <u>lacrymosa</u> Guen. —
811. maculosa Behr.—	♂ ♀ — 829. <u>viduata</u> Guen.
CIRRHOBOLENA Grote.	♂ ♀ — 830. <u>desperata</u> Guen. —
812. deducta (Morr.).	<i>vidua</i> Sm. & Abb.
♀ <i>S. pavitensis</i> Morr.	♂ ♀ — 831. <u>relecta</u> Grote.
813. incandescens Grote.	♂ ♀ — 832. <u>flebilis</u> Grote.
MELIPOTIS Hubn. <sup>2</sup>	♂ ♀ — 833. <u>Robinsoni</u> Grote.
814. jucunda Hubn.	♂ ♀ — 834. <u>Levettei</u> Grote.
<i>Bolina cinis</i> Guen.	<i>C. Judith</i> Streck.
815. agrotipennis Harvey.	♂ ♀ — 835. <u>insolabilis</u> Guen. —
816. limbolaris Geyer.	♂ ♀ — 836. <u>residua</u> Grote.
817. pallescens (G. & R.).	♂ ♀ — 837. <u>obscura</u> Streck.
818. nigrescens (G. & R.).	♂ ♀ — 837a. <u>simulatrix</u> Grote.
819. ochreipennis Harvey.	♂ ♀ — 838. <u>tristis</u> Edw.
820. fasciolaris Hubn. <sup>3</sup>	♂ ♀ — 839. <u>relieta</u> Walk.
821. hadeniformis Behr.—	840. <u>californica</u> Edw.
EUROBOLINA Harvey.	♂ — 841. <u>nebraskae</u> Dodge.
822. impartialis Harvey.	♂ — 842. <u>Meskei</u> Grote.
	843. <u>Walshii</u> Edw.
	844. <u>semirelieta</u> Grote.
	♂ ♀ — <u>Angula</u>

<sup>2</sup> The type of *Bolina* is the European *Catilia*, which is said by Lederer to have the middle tibiae spinose. Our species of *Melipotis* have them unarmed. But *Bolina* is also preoccupied by Montfort. The type of *Melipotis* is *jucunda*. *Aedna* is used by Lederer for a different genus (*leucomelas*).

<sup>3</sup> This species is represented by a specimen before me in coll. Am. Ent. Soc., corresponding precisely with Hubner's figure. It has the forewings of a deep chocolate-brown, with a gray-brown terminal space. There is a large ovate pale-yellowish extra-discal spot, below and continuous with the inner edge of which, the t. p. line, sinuate, shaded outwardly with black, runs to internal margin. It is not toothed as in *nigrescens* etc. Beyond and above the extra-discal spot is a curved line enclosing a brown sub-apical costal patch. The oblique ochreous band is narrow and of even width. Hind wings with pearly white base and broad black borders. The forewings are narrow at base and produced apically with oblique terminal margin. I have already elsewhere exposed Mr. Morrison's error in confounding Hubner's species with *nigrescens* or *ochreipennis*.

<sup>4</sup> The earliest date on which I can find that any copy of Mr. Streck's Number 11 was received is Nov. 12, 1874. His date of "August" can have no relation in fact to a question of priority. Bull. B. S. N. S., 2, 222.

\* Those under scored with red ink have been taken here about Dayton H. S. J.

- ♀ —845. *unijuga* Walk. *N*  
 —846. *junctura* Walk.—  
 —847. *briseis* Edw. *N*  
 —848. *irene* Behr.— *eal*  
 —849. *mariana* Hy. Edw.  
 —850. *cleopatra* Hy. Edw.  
 ? —851. *goncumbens* Walk. *N*  
 ♀ —852. *amatrrix* (Hubn.). *N*  
     *C. selecta* Walk.  
     *C. nurus* Walk.  
     *C. editha* Edw.  
 —853. *arizonae* Grote.  
 —854. *aspasia* Streck.—  
 ♀ —855. *cyra* Guen. *N* /a  
 —856. *coccinata* Grote.  
 —856a. *circe* Streck. *N*  
 ♀ —857. *ultronia* Guen.  
     *Eumetis ult* Hubn.  
 —858. *Verrilliana* Grote.  
 —859. *Stretchii* Behr.—  
 ♀ —860. *parta* Guen. *N*  
     *C. amatrix* † Walk.  
     *C. perplexa* Streck.  
 —861. *faustina* Streck.  
 —862. *adultera* Hinze.—  
 —863. *perdita* Hy. Edw.—  
 —864. *luciana* Hy. Edw.—  
 —865. *hippolyta* Hy. Edw.—  
 —866. *aholibah* Streck.  
 —867. *marmorata* Edw. *N*  
 ♀ —868. *ilia* Guen. *N*  
     *Phalaena ilia* Cram.  
     ? *C. uxor* † Guen.  
 —869. *Snowiana* Grote.<sup>5</sup>  
 —870. *zoe* Behr.—  
 ♀ —871. *innubens* Guen. *N*  
     *var. flavidalis* Grote.
- ♂ —871a. *scintillans* G. & R.  
 —872. *adoptiva* Grote.  
     *C. Delilah* Streck.  
 —873. *cerogama* Guen. *N*  
 —874. *neogama* Guen. *N*  
     *C. communis* Grote.  
     ? *Phal. neogama* Abb. & Sm.<sup>6</sup>  
 —875. *subnata* Grote. *N*  
 —876. *pistrix* Grote.  
 —877. *palaeogama* Guen. *N*  
     *var. phalanga* Grote.  
 —878. *habilis* Grote. *N*  
 —879. *nebulosa* Edw. *N*  
     *C. ponderosa* G. & R.  
 —880. *muliercula* Guen. *N*  
 —881. *consors* Guen.  
     *Phalaena consors* Abb. & Sm.  
 —882. *coelebs* Grote.  
 —883. *antinymphe* (Hubn.). *N*  
     *paranymphe* † Drury.  
     *C. affinis* Westw.  
     *C. melanympha* Guen.  
 —884. *badia* G. & R.  
 —885. *serena* Edw. *N*  
 —886. *anna* Grote.  
     *C. amestris* Streck.  
 —887. *Clintonii* Grote. *N*  
 —888. *illecta* Walk. *N*  
     *C. magdalena* Streck.  
 —889. *nuptialis* Walk.  
     *C. myrrha* Streck.  
 —890. *abbreviatella* Grote.  
 —891. *Whitneyi* Dodge.  
 —892. *Frederici* Grote.  
 —893. *micronympha* Guen.—

5 Size of *ilia*, or perhaps a little smaller. Forewings like *ilia*, t. a. line thick; black shading in submedian space. Hindwings buffyellow with the inner margin of the exterior band without the sinus of *ilia*. Median band broad at costa with an extension towards the disc, superior constriction marked, the band tapers irregularly to internal margin; beneath it is abbreviated; the hindwings resemble *palaeogama* but the band is broader and the insect is lighter. Kansas, Prof. Snow.

6 Texan specimens collected by Mr. Belfrage differ from northern *communis*, by having less brown on forewings, basal dash distinct, lines blacker and a brighter tint of hind wings. It is possible that they should be separated as the true *neogama* of Abb. & Smith. *Catocala connubiata*, Guen., described from Abbot's drawings, cannot be identified.

- ♂ ♀ — 894. *polygama* Guen. *Dance* — **PLEONECTYPTERA** Grote.  
♂ ♀ — 895. *crataegi* Saund. *N. Y.* 916. *pyralis* (Hubn.).  
♀ — 896. *amasia* Westw. 917. *geometralis* Grote.  
*Phalaena amasia* Abb. & Sm. 918. *phalaenalis* Grote.  
(upper fig.) 919. *immaculalis* Harvey.  
♂ — 897. *formula* G. & R. *Z.* **REMIGIA** Guen.  
*Phal. amasia* Abb. & Sm. (lower fig.) ♂ ♀ 920. *hexastylus* Harvey.  
*O. aholah* Streck. ♂ ♀ 921. *latipes* Guen.  
922. *texana* Morr.  
923. *indentata* Harv.  
924. *var. indentata* Harv.  
♂ ♀ — 898. *alabamiae* Grote.  
♂ ♀ — 899. *grynea* (Gram.). *A.* **PROBERIA** Hubn.  
*O. nuptula* Walk. 922. *atomaris* Hubn.  
*O. atarah* Streck. *Lyssia orthosioides* Guen.  
♂ ♀ — 900. *praeclara* G. & R.  
♂ ♀ — 901. *fratercula* G. & R. **HOMOPROBERIA** Morr.  
*O. atarah* Streck. 923. *cristata* Morr.—  
*O. parvula* Edw. ? *Gonodontis peplaria* Geyer.  
924. *gracilis* Edw. **CELIPTERA** Guen.  
*O. similis* Edw. ♂ ♀ — 924. *frustulum* Guen.  
*O. amica* (Hubn.). *Litomitus elongatus* Grote.  
*O. androphila* Guen. ♂ ♀ — 925. *nivelcostatus* Grote.  
926. *glans* Grote.  
♂ ♀ — 905. *lineella* Grote. **PSEUDOLIMACODES** Grote.  
906. *messalina* Guen.— — 925. *nivelcostatus* Grote.  
907. *Belfragiana* Harvey. 926. *glans* Grote.  
*O. jocaste* Streck. **PHURYS** Guen.  
927. *vinculum* Guen.  
928. *lima* Guen.  
**ALLOTRIA** Hubn.  
♀ — 908. *elonympha* Hubn. **PARALLELIA** Hubn.  
929. *bistriaris* Hubn.  
**OPHIDERES** Boisd. **AGNOMONIA** Hubn.  
909. *materna* (Linn.). *Florida!* ♂ ♀ — 930. *anilis* (Drury).  
*Ag. sesquistriaris* Hubn.  
**TOXOCAMPA** Guen. ♂ ♀ — 931. *quadriflaris* Guen.  
*Agnomonia quadr.* Hubn.  
931a. *obsoleta* Grote.  
*var. A. Guen. No. 1750.*  
**SPILOLOMA** Grote. ♂ ♀ — 932. *sylvarum* Guen.  
933. *deleta* Guen.  
934. *erasa* Guen.  
935. *herbicola* Boisd.  
935. *carneicosta* Guen.

936. *contempta* *Boisd.*—  
 937. *flavistriaria* (*Hubn.*).—  
 938. *perplexa* *Boisd.*—  
 939. *bistrigata* *Guen.*—  
*Ptichodes bistr.* *Hubn.*  
 940. *herbarum* *Guen.*—<sup>7</sup>
- TRAMA *Harvey.*  
 941. *arrosa* *Harvey.*  
 942. *hinna* (*Heyer*).  
 EUTOREUMA *Grote.*  
 943. *tenuis* *Grote.*  
 ISOGONA *Guen.*  
 944. *natrix* (*Guen.*)—  
 ANTICARSIA *Hubn.*  
 945. *gemmatilis* *Hubn.*  
 ANTIBLEMMA *Hubn.*  
 946. *canalis* *Grote.*  
 AGASSIZIA *Behr.*  
 947. *urbicola* *Behr.*—  
 CAPNODES *Guen.*  
 948. *californica* *Behr.*—  
 EREBUS *Latr.*  
 949. *odora* *Lin.*  
 THYSANIA *Dalman.*  
 950. *zenobia* (*Cram.*)<sup>8</sup>—  
 ZALE *Hubn.*  
 ♀—951. *horrida* *Hubn.*<sup>9</sup>  
*Homoptera calycanthata* †  
 Walk., *Beth.*
- PNEOCYMA *Hubn.*  
 952. *lunifera* *Hubn.*
- HOMOPTERA *Boisd.*  
 ♂ ♀ — 953. *edusa* (*Drury*).  
 ♂ ♀ — 954. *Saundersii* *Beth.*  
 ♂ ♀ — 955. *nigricans* *Beth.*—  
 ♂ ♀ — 956. *lunata* (*Drury*).  
*Hom. rosae* *Behr.*  
 957. *minerea* *Guen.*  
 958. *calycanthata* (*Abb. & Sm.*).  
 959. *albofasciata* *Beth.*  
 960. *edusina* *Harvey.*  
 961. *atritincta* *Harvey.*  
 962. *galbanata* *Morr.*—  
 963. *uniformis* *Morr.*—  
 964. *cinerea* *Morr.*—  
 965. *penna* *Morr.*—  
 966. *unilineata* *Grote.*  
 ♂ ♀ — 967. *stylobata* *Harvey.*  
 ♂ ♀ — 968. *mima* *Harvey.*  
 ♂ ♀ — 969. *obliqua* (*Guen.*)  
 970. *duplicata* *Beth.*  
 (præc. dist.?)  
 971. *benesignata* *Harvey.*  
 YPSIA *Guen.*  
 972. *aeruginosa* *Guen.*  
 973. *umbripennis* *Grote.*  
 ♂ — 974. *undularis* *Drury.*  
 PSEUDANTHROECIA *Grote.*  
 975. *coracias* (*Guen.*).  
*?squamularis* *Drury.*  
 976. *cornix* (*Guen.*).—  
 MATIGRAMMA *Grote.*  
 977. *pulverilinea* *Grote.*  
 978. *laena* *Harvey.*  
 ARGILLOPHORA *Grote.*  
 979. *furcilla* *Grote.*

<sup>7</sup> The following can hardly be identified from published descriptions: *Poaphila patibilis*, *revoluta*, *ingenua*, *obversa*, *porrigens*, *paculis*, *Phurys perlata*, *Poaphila detrahens*,? *turbata*,? *revoluta* (p. 1836), of the British Museum Lists. Also *Hypogramma andromedae* *Guen.*, described from Abbot's drawings:

<sup>8</sup> Professor Riley informs me that this species occurred at Davenport.

<sup>9</sup> I do not feel satisfied as to the value of the genera separated by Guenee from Homoptera, but nothing is here altered. It is evident that Guenee should have used *Anthraxia* instead of *Ypsia*, but since his action the former must be left for the species *epialtes* *Hubn.*

SPARGALOMA Grote.

980. seypunctata Grote.  
981. umbrifascia Grote.

HEXERIS Grote.

982. enhydris Grote.

SYLECTRA Hubn.

983. erycata Grote.  
*Phalaena erycata* Cram.  
*Syl. mirandalis* Hubn.  
*Teratocera ericata* Guen.

PANGRAPTA Hubn.

984. decoralis Hubn.  
*Marmorinia epionoides* Guen.  
*Marm. geometroides* Guen.  
*Hypena elegantalis* Fitch.

PHALAEOSTOLA Grote.

985. larentioides Grote.  
986. citima Grote.

HOMOPYRALIS Grote.

- ♂ ♀ — 987. tactus Grote.  
988. tantillus Grote.

**Deltoides** Latr.

PSEUDOGLOSSA Grote.

- ♂ ♀ — 989. lubricalis Grote.  
*Epizeuxis lubricalis* Geyer.  
*Helia* || *phaealis* Guen.  
*Bleptina surrectalis* Walk.

- ♂ ♀ — 990. denticularis Harvey.

EPIZEUXIS Hubn.

- ♂ ♀ — 991. aemula Hubn.  
*Helia* || *aemulalis* Guen.  
*Hormisa absorptalis* Walk.  
*Microphysa* ? *mollifera* Walk.

- ♂ ♀ — 992. americalis (Guen.).

*Microphysa* ? *scriptipennis* Walk

MEGACHYTA Grote.

993. lituralis (Hubn.).  
994. decepticalis Zell.

LITOGNATHA Grote.

- 995. nubilifascia Grote.  
996. litophora Grote.

CHYTOLITA Grote.

- ♂ ♀ — 997. morbidalis (Guen.).

PITYOLITA Grote.

998. pedipilalis (Guen.).

ZANCLOGNATHA Led.

999. laevigata Grote.  
1000. ochreipennis Grote.  
♂ ♀ — 1001. cruralis Grote.  
*Herminia cruralis* Guen.

- p — 1002. marcidilinea Grote.

1003. obscuripennis Grote.<sup>11</sup>

CLEPTOMITA Grote.

1004. atrilineella Grote.

COPTOCNEMIA Zell.

1005. floccalis Zell.—

PHILOMETRA Grote.

1006. longilabris Grote.  
1007. serraticornis Grote.

SALIA Hubn.

1008. interpuncta Grote.  
*Colobochila saligna* Zell.

RIVULA Guen.

1009. propinquialis Guen.

PALTHIS Hubn.

- ♀ — 1010. angulalis Hubn.  
1011. asopialis (Guen.).

PHALAEOPHANA Grote.

- ♂ ♀ — 1012. rurigena Grote.

10 The following cannot be satisfactorily determined: *contracta* and *hermintoides* Walk., in Can. Nat. & Geol. 5. One of these is supposed to be *Epizeuxis aemula*. Also *lineosa*, *plenipennis*, *cingulifera*, *deciarans*, *integerrima*, of the British Museum Lists. (Refer to No. 971, page 43.)

11 The following species cannot be recognized: *Herminia jacchusalis*, *protumnusalis*, *eumelusalis*, *cloniasalis*, *pyramusalis* (*gyasalis*), *phalerosalis*, *salusalis*, *heliusalis*, *clitosalis* of the British Museum Lists.

- PSEUDORGYIA *Harvey*.  
 1013. *versuta Harvey*.  
 SISYRHYPENA *Grote*.  
 1014. *pupillaris Grote*.  
 RENIA *Guen*.  
 ♀ - 1015. *discoloralis Guen*.  
     *Hypena fallacialis Walk*.  
 1016. *brevirostralis Grote*.  
 1017. *alutalis Grote*.  
 1018. *restrictalis Grote*.  
 1019. *centralis Grote*.  
 1020. *Belfragei Grote*.  
     *R. pastoralis Grote*.  
 TETANOLITA *Grote*.  
 1021. *lixalis Grote*.  
 1022. *?plenilinealis Grote*.  
 BLEPTINA *Guen*.  
 ♀ - 1023. *caradrinalis Guen*.  
 1024. *inferior Grote*.  
 HYPENULA *Grote*.  
 1025. *opacalis Grote*.  
 LOMANALTES *Grote*.  
 1026. *laetulus Grote*.  
 BOMOLOCHA *Hubn*.  
 1027. *baltimoralis Guen*.  
     *Hypena laciniosa Zell*.  
     *Hypena benignalis Walk*.  
 1028. *scutellaris Grote*.  
     *Coremia palparia* || *Walk*.!  
 1029. *manalis (Walk.)*.  
 1030. *bijugalis (Walk.)*.  
     *Hypena pallialis Zell*.  
 ♀ - 1031. *abalienalis (Walk.)*.  
 1032. *annulalis Grote*.<sup>12</sup>  
 ~ 1033. *achatinalis (Zell)*.  
     *?Hypena madefactalis Guen*.  
 1034. *trituberalis (Zell)*.—  
 1035. *citata (Grote)*.  
 § *Euhypena Grote*.  
 1036. *toreuta Grote*.  
     *Hypena internalis* || *Rob*.  
     *Hypena albisignalis Zell*.  
 1037. *sordidula Grote*.  
 § *Macrhypena Grote*.  
 ♂ - 1038. *profecta Grote*.  
 ♂ - 1039. *deceptalis Walk*.  
 1040. *perangulalis Harvey*.  
 § *Meghypena Grote*.  
 1041. *vellifera Grote*.  
 1042. *lentiginosa Grote*.  
 ♂ - HYPENA *Fabr. ♂*.  
 ♂ - 1043. *humuli Harris*.  
     ♀ *Hyp. evanidalis Robs*.  
 1043a. *olivacea Grote*.  
 1044. *californica Behr*.<sup>13</sup>  
 PLATHYPENA *Grote*.  
 ♂ - 1045. *scabra (Fabr.)*.  
     *Orambus crassatus Haw*.  
     *Hypena obesalis Steph*.  
     ♀ *Hypena erectalis Guen*.  
     *var. subrufalis Grote*.  
 HETEROGRAMMA *Guen*.  
 1046. *indivisalis Grote*.  
 TORTRICODES *Guen*.  
 1047. *bifidalis Grote*.  
 NOCTUO-PHALAENIDI *Boisd*.  
 BREPHOS *Hubn*.  
 ♂ - 1048. *infans Moeschl*.  
     *Brephos hamadryas Harr*.  
 1049. *californicum Boisd*.—  
 1050. *melanis Boisd*.—  
 LEUCOBREPHOS *Grote*.  
 1051. *brephoides (Walk)*.  
     *Archicaris resoluta Zell*.

12 This brown and light purple Texan species differs by the sagittate pale s. t. line, becoming white at apices, and followed by dark marks. A fine white line bordering inwardly the dark line on the terminal margin. A dark diffuse shade from the disc crossing the s. t. line and extending upwardly to apex. T. a. line dentate; t. p. line continuous and nearly even. Beneath the apical pale dots are prominent. Belfrage No. 213, expanse 26 mil.

13 The following cannot be identified: *Hypena habitalis*, *cacuminalis*, *factiosalis*, *eductalis*, *caecalis*, *germanalis*, *cauducalis*, *edictalis*, *damnosalis*, *generalis*, of the British Museum Lists.

# Corrections to Part First

and omitted Species.



## BOMBYCIA Hubn.

- $\frac{1}{2}$ . *improvisa* (Hy. Edw.).

## APATELA Hubn.

- 36 $\frac{1}{2}$ . *connecta* Grote.

## AGROTIS Hubn.

- 139 *mimallonis* Grote.  
*A. rufipennis* Grote (138).  
190. *clandestina* (Harris).  
*Noctua cland.* Harr.  
*Mamestra unicolor* Walk.

## MAMESTRA Ochs.

214. *imbrifera* Grote.  
*Aplecta imb.* Guen.  
223 $\frac{1}{2}$ . *teligera* Morr.  
235. *trifolii* (Esp.).  
*Mam. albifusa* (234).

## ONCOCNEMIS Led.

- 340 $\frac{1}{2}$ . *occata* Grote. (557).

## ARSILONCHE Led.

415. *henrici* Grote.  
var. *evanidum* Grote. (416)  
acc. ab. *fumosum* Morr. (417)  
418. *absidum* (Harvey).  
418 $\frac{1}{2}$ . *album* Harvey.

## ACERRA Grote.

- 477 $\frac{1}{2}$ . *normalis* Grote. (652)

## CLEOPHANA Boisd.

557. *eulepis* Grote. n. s.

## STIRIA Grote

652. *rugifrons* Grote.

## PLAGIOMIMICUS Grote.

653. *pityochromus* Grote.  
*Schinia media* Morr. (659)

## RHODODIPSA Grote.

- 666 $\frac{1}{2}$ . *volupia* (Fitch.) (Colorado!)

## TARACHE Hubn.

743. *binocula* Grote. n. s.

## EUSTROTIA Hubn.

762. *concinnimacula* (Guen.).

## THALPOCHARES Led.

- 762 $\frac{1}{2}$ . *patruelis* (Grote). (743)

## GALGULA Guen.

783. *subpartita* Guen.  
*Galg. partita* Guen.  
*Telesilla vesca* Morr. (592)

*Species published since the issue  
of Part First of this List.*

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APATELA *Hubn.*

1052. *spinea Grote.*

JASPIDEA *Hubn.*

1053. *viridata Harvey.*

AGROTIS *Hubn.*

1054. *turris Grote.*  
*Cinereomacula* † *Grote.*

1055. *opaca Harvey.*

1056. *Milleri Grote.*

1057. *cinereicollis Grote.*

1058. *costata Grote.*

1059. *brunneigera Grote.*

1060. *albipennis Grote.*

1061. *vapularis Grote.*

1062. *aeneipennis Grote.*

1063. *hortulana Morr.—*

1064. *strigilis Grote.*

1065. *recula Harvey.*

1066. *aequalis Harvey.*

1067. *satis Harvey.*

1068. *choris Harvey.*

1069. *pyrophiloides Harvey.*

1070. *sierrae Harvey.*

1071. *insularis Grote.*

1072. *emarginata Grote.*

1073. *facula Grote.*

1074. *discoidalis Grote.*

1075. *variata Grote.*

1076. *varix Grote.*

1077. *orbis Grote.*

1078. *laetula Grote.*

1079. *perpolita Morr.—*

1080. *fauna Morr.—*

1081. *olivia Morr.—*

1082. *comosa Morr.—*

1083. *hero Morr.—*

1084. *orthogonia Morr.—*

1085. *personata Morr.—*

1086. *pleuritica Grote.*<sup>14</sup>

§ *Anida Grote.*

1087. *nigrovittata Grote.*

§ *Ammoconia Led.*

1088. *aratrix Harvey.*

§ *Pachnobia Guen.*

1089. *alaskae Grote.*

§ *Eurois Hubn.*

1090. *Fernaldi Morr.*

1091. *tristicula Morr.—*

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<sup>14</sup> ♂ Allied in structure and color to *Pitychrous*, larger (40 mil.), without the costal or other pale shading, of a uniform gray with a yellow brown staining. Orbicular spherical, gray, black-ringed, with dark center, larger than in its ally; claviform short, narrow, without the continuous streak; t. p. less faintly indicated; all the lines geminate; terminal space darker than the wing. Hind wings whitish at base, with broad vague border; fringes white tipped, interlined, whereas in *pitychrous* they are pure white. Thorax concolorous with primaries; patagia marked with white on the shoulder. Beneath pale with faint outer lines and discal marks; a common dark terminal marked line, more distinct on hind wings. There are no cuneiform or vein markings before the s. t. line of primaries in this species, which is as large as *messoria* and resembles dark specimens of *pitychrous* in color. Canada, (Mr. Saunders).



**MAMESTRA** *Ochs.*

- 1092. *brachiolum* Harvey.
- 1093. *orobia* Harvey.
- 1094. *quadrannulata* Morr.—
- 1095. *nevadae* Grote.
- 1096. *comis* Grote.
- 1097. *alboguttata* Grote.

**HADENA** *Schränk.*

- 1098. *olorina* Grote.
- 1099. *quaesita* Grote.
- 1100. *illata* (Walk.).  
*Agrotis insignata* || Walk.  
*Agrotis illata* Walk.
- 1101. *Dunbari* Harvey.
- 1102. *chlorostigma* Harvey.

**METAHADENA** *Morr.*

- 1103. *atrifasciata* Morr.—

**PERIGEA** *Guen.*

- 1104. *niveivena* Harvey.
- 1105. *iole* Grote.
- 1106. *proxima* (Morr.).—

**ONCOCNEMIS** *Led.*

- 1107. *Augustus* Harvey.
- 1108. *Saundersiana* Grote.

c  
r

**GORTYNA** *Hubn. (non Led.).*

- 1109. *appassionata* Harvey.
- 1110. *necopina* Grote.
- 1111. *obliqua* Harvey.

**TAPINOSTOLA** *Led.*

- 1112. *variana* Morr.—

**HELIOPHILA** *Hubn.*

- 1113. *pilipalpis* Grote.

**CARADRINA** *Ochs.*

- 1114. *flavimaculata* Harvey.
- 1115. *conviva* Harvey.

**GRAPHIPHORA** *Hubn.*

- 1116. *pulchella* Harvey.
- 1117. *vegeta* (Morr.).—
- 1118. *revicta* (Morr.).—

**ACERRA** *Grote.*

- 1119. *muricina* Grote.

**PSEUDOGIAEA** *Grote.*

- 1120. *taedata* Grote.
- 1121. *blanda* Grote.

**HOMOGIAEA** *Morr.*

- 1122. *hircina* Morr.—

**CALYMNIA** *Hubn.*

- 1123. *calami* Harvey.

**ORTHOSIA** *Ochs.*

- 1124. *americana* Morr.—
- 1125. *immaculata* Morr.—

**LITHOPHANE** *Hubn.*

- 1126. *oregonensis* Harvey.
- 1127. *carbonaria* Harvey.

**ALETIA** *Hubn.*

- 1128. *hostia* Harvey.

**LYGRANTHOECIA** *G. & R.*

- 1129. *scissa* Grote.

**EUSTROTIA** *Hubn.*

- 1130. *caduca* Grote.

**THALPOCHARES** *Led.*

- 1131. *elegantula* Harvey.
- 1132. *carmelita* Morr.<sup>15</sup>

<sup>15</sup> As impossible to be identified, I omit Mr. Strecker's descriptions of unfigured species, e.g. of *Heliothis* etc. The synonymical notes given in his work I have neglected as unreliable and in no way explained. It is not clear that Mr. Strecker knows the species he sometimes cites, and the proof of his correctness must be established by independent evidence to be accepted.

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